# Lectures ON THE RELATIONS OF SARCOMA TO CARCINOMA.

*Delivered at the Royal College of Surgeons in June, 1880,*

BY HENRY TRENTHAM BUTLIN, F.R.C.S.,

ERASMUS WILSON PROFESSOR OF PATHOLOGY TO THE COLLEGE, ASSISTANT-SURGEON TO ST. BARTHOLOMEW'S HOSPITAL, &c.

## LECTURE II.—PART I.

### SUBPERIOSTEAL TUMOURS OF BONE.

MR. PRESIDENT AND GENTLEMEN,—The elaborate papers on "Sarcoma of the Long Bones" which have recently been published in the *American Journal of the Medical Sciences*,[1] based on a study of so large a number as 165 cases, and issuing from the pen of one of the ablest American surgeons, wellnigh deterred me from carrying out the project I had already formed of making sarcoma of bone the subject of some part of the present course of lectures. But on deliberation, I determined to adhere to that which I had purposed; for, in a subject so extensive, and possessing so many and such important bearings, even a study of the views now generally held would in itself be interesting. Such a study would not, however, as I think, fulfil the intention which your learned Committee had in view when they considered the scope of this professorship, and assigned to it its limits. Bearing in mind their design—the encouragement of original pathology,—I have employed the work of others only so far as may be necessary to enlarge or illustrate my subject; and have sought to combine and analyse the material at my disposal in such a manner as may serve perhaps to elicit some new fact or strengthen already existing views, and always in the hope of affording new material for the thought and work of others.

In the consideration of sarcoma of bone, I shall differ from Professor Gross in including sarcomas of all bones, with one exception—the upper jaw, the tumours of which are often of uncertain origin; and from almost all authors in placing the various tumours collected together under the generic term "Osteoid," each in the group to which the cell-growth which forms its basis appears naturally to refer it. In accordance with the general plan of division of tumours laid down yesterday all primary malignant tumours of bone must be regarded as sarcomas. For no epithelial elements exist normally in bone. The hard parts, the cancellous tissue, medulla, nerves, bloodvessels and lymphatics, even the endothelial lining of the vessels, belong to the connective-tissue series. The tumours which grow from bone must therefore be connective-tissue tumours, not carcinomas, and the presence of an alveolar structure, if decidedly impressed, can only serve to inspire a doubt if such a tumour be really primary. The subject, thus simplified, would still be very complex; but, happily, it is capable of division by an easy and natural method. I mean by separate consideration of the tumours of central and those of superficial origin. I shall speak of them throughout as central and subperiosteal; for although the latter are more probably of periosteal than of osseous origin, the term "subperiosteal" will serve to distinguish them from tumours growing from the outer surface of the periosteum, which will not be included in the present study. Of most tumours it is easy to decide the origin; but tumours which have attained a large size, and have by their growth destroyed much of the structures in whose midst they lie, the difficulty is often insuperable. The presence of a thin, bony shell surrounding the tumour, or the maintenance of the outline, however much thinned and softened, of the cortex through it, its position, shape, the relation of the periosteum to the bone at its extreme limit, are points to which the attention is sure to be directed in a doubtful case. Where these guides fail the case had best be laid aside as useless, or unsafe for purpose of comparison.

The subperiosteal sarcomata may be all arranged under three heads—(1) round-celled, (2) spindle-celled, and (3) mixed-celled sarcoma. The round-celled and spindle-celled require no further definition than that which applies to such tumours wherever they occur. The first consist of vast numbers of round cells, generally of equal or nearly equal size, and bearing similar characters, embedded in a homogeneous or granular basis substance, often fibrillated or distinctly fibrous, or maybe calcified or chondrified, or even ossified, in parts. With these are associated the finely-reticulated tumours whose structure resembles that of a lymphatic gland, which have on that account received the name of "lympho-sarcoma" or "lymphadenoma"—a name to which their structure perhaps entitles them, even when their relation to adenoid or lymphatic tissue cannot be proved. In the second group all the other conditions may be those prevailing in the first, but the type of cell is altered. It is no longer round or oval, but is narrow and elongated. Although by courtesy these cells are all called spindle-cells, many of them are fibre-like or oat-shaped, or look like grains of wheat. As in form, so in size, the difference is striking, the cells of one tumour comparing as a race of giants with the pigmy forms belonging to another.

There still remain many tumours which, by reason of the various forms and characters of their cells, can neither be included among the round nor spindle-celled sarcomas. Not only in different sections of the same tumour, but in different areas of the same section, or even in the different parts of the same field of the microscope, may be discerned round, oval, elongated, spindle, and stellate cells, or the soft parts of a tumour may be formed of round and spindle, or of oval and stellate cells. Of these more complex tumours I have thought fit to make one separate group; not because they present precisely similar characters, but because they possess characters in common, which unite them more closely with one another, than with the tumours of either of the other groups. The presence of bone or lime salts or cartilage does not render a tumour mixed celled. The practice so universally adopted of classing together all tumours, large portions of which are ossified or calcified, and considering them as one common group, because they are so ossified or calcified appears unworthy of our present knowledge. The soft tumours are grouped according to the form of their cells; but hard tumours, or those which possess a hard base, are grouped together without reference to their more essential characters, as osteo- or osteoid sarcomas, or osteoid cancers, or osteoid chondromas. The term osteoid is singularly open to objection. It implies the presence of a substance like bone, yet not bone. Its use should be restricted to tumours which are calcifying; which present when macerated large, white, hard, chalk-like masses. But it is employed equally to designate those which are ossifying, which contain true bone. An osteoid cancer or sarcoma is, then, a sarcoma of bone which is either ossifying or calcifying. That is, the word osteoid is used to denote the presence of bone and of a substance like bone. If we could not distinguish between these two substances there would still exist a reason why we should call these tumours osteoid. But we can distinguish whether a sarcoma is ossifying or calcifying, therefore there is no reason why we should not call it an ossifying or calcifying sarcoma. Indeed, there is every reason why we should do so, and why we should discard a term which is unnecessary, and is often used inconsistently.

Again, an osteoid chondroma should be a tumour composed of cartilage but like bone. An osteoid chondroma, however, is usually a sarcoma, many parts of which are transformed into a substance in some respects resembling cartilage, or, rather, resembling the animal basis of a rough kind of bone after its earthy salts have been removed. If it were impregnated with earthy salts it would be true bone, and would cease to be cartilage. But it contains no earthy salts and is therefore not osteoid, at least in the same sense as an osteoid sarcoma or cancer is said to be osteoid. It is in truth a chondrifying sarcoma. The term osteo-sarcoma is on some accounts more objectionable than osteoid sarcoma. It may mean a soft sarcoma of bone or a sarcoma growing in the interior of a bone or a sarcoma which contains bone, and which grows either from a bone or from the soft parts. It is employed by different authors in all these different senses. It is therefore worse than useless, for it may mislead. To all these terms the same objection may be raised. They are not employed always in the same sense or to express the same condition. They are employed inconsistently, and are therefore mischievous.

Nothing is easier than to criticise or attack existing customs and institutions, but he who would destroy should

[1] July, 1879, p. 17. Professor Gross.

in honour be prepared to replace them by others which can be shown not only to be newer, but better adapted to the particular purpose for which they are to be employed. I have, however, no new nomenclature to propose, for with the exception of the word "mixed-celled," which appears unavoidable, I have introduced no new term into the nomenclature of bone sarcomas. But I desire that as the simple sarcomata of bone are classed according to the form of their cells, and as little difficulty is experienced in assigning to each its place, so may the more complex tumours which contain bone, or earthy salts, or cartilage, be classed according to the form of the cells which compose their softer parts. It is by the transformation of these softer parts that bone and cartilage are formed, and by the increase of these softer parts the increase of the mass takes place. If particles of bone, or lime, or cartilage are scattered through the tumour, no modification of its name seems needful. But if a large proportion of these tissues should occur so that the characters of the tumour are materially altered by them, this alteration may be expressed by some appropriate term preceding that which applies to the tumour, on account of the form of its cells. For example, this tumour, which consists partly of dense, hard substance, partly of soft succulent material, is a calcifying spindle-celled sarcoma, for the succulent material is formed of spindle cells, and the hard substance is impregnated with earthy salts, but there are no lacunæ or canaliculi. Again, this tumour, which presents to the eye characters almost identical, is an ossifying mixed-celled sarcoma, for the succulent material is formed of mixed cells, and the hard substance has the structure of the rough bone common in such tumours. A nomenclature such as this is sufficiently simple and easy of application. Of fifty-six cases of subperiosteal sarcoma, of which the accounts are sufficiently complete, twenty-two were round-celled, eighteen spindle-celled, and sixteen mixed-celled. The bones affected by them were—the femur in twenty-one instances, the skull and the tibia each in nine, the humerus in five, pelvis and lower jaw each in three, the clavicle and fibula in two, the ulna in one, and ribs in one. The relative proportions are probably approximately correct for all bones except the pelvis. But the number of tumours of the pelvis, especially of the sacrum, would be greater were it not for the extreme difficulty of deciding whether their origin is central or superficial.

Were I to follow the ordinary method of describing these subperiosteal tumours, I should write a separate account of each of the three groups of sarcoma in its relation to the bones, should state what bones it most commonly attacks, what is the manner of its growth, what its characters, its progress, duration, and its termination. But I think we shall gain a better knowledge of them if we employ a more tedious, but perhaps more useful, method of investigation, and study their characters and the conditions of their existence in each particular bone which they affect.

The *femur* is of all bones by far most frequently affected by subperiosteal sarcoma. It is subject to all three forms, and apparently to all three nearly in the same proportion; for of twenty-one cases five were round-celled, eight were spindle-celled, eight mixed-celled. The five *round-celled* sarcomas all grew about the lower third or lower epiphysis. They attacked patients, four of whom were males, varying in age from sixteen to twenty-seven years. Of three a squeeze or blow was the cause assigned; all were most rapid in their growth. Only one affected the lymphatic glands. In four amputation was performed, and in neither of the four was there recurrence in the stump. One of these patients recovered from the amputation and remained well after a period of fourteen months.

But thus to analyse in numbers each sub-group of tumours would weary you, and waste time which might more profitably be employed. I have therefore had these tables prepared, from which many of their more important characters may easily be read, and shall content myself with explaining what may seem to need explanation, with pointing out analogies and distinctions, and with supplying so far as possible the deficiencies which cannot but exist in tabular analyses.

Of these five cases only No. 1 was permitted to run its natural course. The tumour was a large chondrifying and calcifying sarcoma in a woman, twenty years of age. No operation was performed, and eight months after the first appearance of the growth the patient fell a victim to the disease. The tumour never ulcerated, but secondary tumours formed in the integument of the abdomen and axilla; and after death the lungs and kidney were infiltrated with new growths, some of which, like the primary tumour, were calcified. Although amputation of the thigh was performed on No. 2, the operation can scarce be thought to have changed the course which the disease would naturally have run. Seven weeks after the operation the patient sank and died from a generalisation so extensive that I have no parallel case. The calvaria, sternum, heart, lungs, liver, kidneys, and inguinal glands were all the seat of secondary growths. And as the primary tumour was a blood-cyst, so were the growths of which it was the parent soft, easily broken down, and black with blood. The whole duration of the disease was only fourteen or fifteen weeks.

Of these five cases three were such as would generally be termed osteoid, and would therefore be classed separately from the softer tumours. But the most careful study fails to discover that they possess in common any characters except their bony structure, which distinguish them from tumours which contain no bone.

Of the eight cases of *spindle-celled* tumours, three affected the diaphysis, and five the lower third. The subjects of them ranged from nine to forty-one years old. The growth of all was rapid, the issue fatal. But death in three was due directly to the operation which had been practised for their relief. Though only one case was not submitted to operation, three may be considered to have run an almost natural course. On No. 6 an amputation at the hip was followed by the appearance of tumours beneath the skin in various regions, and in six months by death. But a more accurate account, together with the post-mortem examination, could not, unfortunately, be obtained. No. 9, whose tumour contained bone and cartilage, died from amputation of the hip; but had she survived the operation, the period of a year, during which the tumour had existed, could only have been extended for a short space longer, for secondary growths were already disseminated through both lungs.

In No. 11 many characters of the disease are so well exemplified that the case deserves more ample record. The patient was a married woman, twenty-seven years of age, under the care of Mr. Callender. The tumour had commenced a year before her admission to the hospital high up in front of the left thigh. Its growth, which had been slow at first, had latterly attained a fearful speed. It formed a smooth, elastic, almost fluctuating mass, but little painful, and not hot, the integument covering it dusky, œdematous, and traversed by large and tortuous veins. The whole thigh was occupied from the groin almost to the knee. Until her death, two months later, she remained an inmate of the hospital. During this time the tumour continued to increase in size, and the groin glands became enlarged, but the skin remained unbroken to the last. The autopsy discovered an enormous, brain-like growth, springing from the bone whose upper part was bare and rough. The periosteum was destroyed, and the tumour, infiltrating the surrounding muscles, passed up beneath the pubic arch into the pelvis and abdomen. There spreading, it attacked the bladder and the iliac veins, penetrating the walls of veins and viscus. The inguinal, pelvic, and lumbar glands were enlarged and sarcomatous, and both lungs were filled with growths. The cells which composed the tumours were rather oat- than spindle-shaped, and presented a singular uniformity in size and shape. In its continuous growth, infiltration of the surrounding structures, absence of ulceration, but secondary affection of the lungs, this tumour presents all the characters we may expect to find in a spindle-celled sarcoma of the femur. Only in one important respect does it differ from all the tumours of the same sub-group. The lymphatic glands were full of the same brain-like substance as that which formed the tumour. It may be that this rare event was caused by a continuous infiltration of some of the femoral or inguinal glands, and that from these the affection spread along the unwonted channel until gland after gland was transformed into a malignant mass.

Only in two cases was there recurrence after amputation. No. 7 and No. 15 were both females, and of nearly equal age. The former suffered amputation through the thigh for the removal of a tumour which had been three months growing, and had not yet attained a formidable size. It proved to be a brain-like mass, but broken down and mixed with semi-clotted blood—a form of the old fungus hæmatodes. Three months later she returned with recurrence in the stump, and disarticulation of the hip was practised. The second tumour, like that of which it was a recurrence, was full of black and semi-clotted blood. The patient rallied

## SUBPERIOSTEAL TUMOURS OF BONE.

| No. of case. | Sex. | Age. | Seat. | Simple or mixed. | Affection of surrounding parts. | Duration to operation. | Nature of operation. | Total duration. | Cause of death. | Recurrence after operation. | Affection of glands. | Affection of lungs. | Affection of other parts. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | *Femur: Round-celled.* | | | | | | | | | | |
| 1 | F. | 20 | Lower third | Calc. & cart. | — | — | 0 | 8 m. | Disease | — | 0 | Yes | Skin, kidney. |
| 2 | M. | 27 | Lower epiph. | Simple | — | 2 m. | Amp. thigh | 3½ ,, | ,, | 0 | Inguin. | Yes | Calv., sternum, heart, liver, & kidney. |
| 3 | M. | 24 | Lower third | Calcifying | Muscles | 6 ,, | Amp. hip | 11 ,, | ,, | 0 | 0 | Yes | Liver, spleen. |
| 4 | M. | 26 | Lower epiph. | Simple | 0 | 15 ,, | Amp. thigh | 15 ,, | Pyæmia | 0 | 0 | — | No post-mortem examination. |
| 5 | M. | 16 | Lower third | Bone | — | 1 ,, | ,, | — | — | 0 | 0 | — | Well fourteen months after operation. |
| | | | *Femur: Spindle-celled.* | | | | | | | | | | |
| 6 | M. | 14 | Diaphysis | Simple | Muscle | 8 ,, | Amp. hip | 14 m. | Disease | 0 | — | — | No post-mortem examination. |
| 7 | F. | 21 | Lower third | ,, | — | 3 ,, | Amp. thigh | 8 ,, | ,, | Yes | 0 | — | No post-mortem examination. |
| 8 | M. | 41 | ,, | ,, | 0 | 3½ ,, | ,, | 4 ,, | Septicæm. | 0 | 0 | 0 | 0 |
| 9 | F. | 31 | Diaphysis | Bone & cart. | 0 | 12 ,, | Amp. hip | 12 ,, | Disease | 0 | 0 | Yes | 0 |
| 10 | F. | 9 | Lower third | Simple | Muscle | 1 ,, | Incision | 4 ,, | Suppurtn. | 0 | 0 | 0 | 0 |
| 11 | F. | 27 | Diaphysis | ,, | ,, | — | 0 | 14 ,, | Disease | — | Inguin. | Yes | 0 |
| 12 | F. | 54 | Lower third | ,, | — | 3 m. | Amp. thigh | 3 ,, | Pyæmia | 0 | 0 | 0 | 0 |
| 13 | F. | 18 | ,, | Calc. & cart. | — | 12 ,, | ,, | 30 ,, | Disease | Yes | 0 | Yes | 0 |
| | | | *Femur: Mixed-celled.* | | | | | | | | | | |
| 14 | M. | 14 | Diaphysis | Bone & cart. | 0 | 3 ,, | Amp. hip | 3 ,, | Shock | — | 0 | Yes | 0 |
| 15 | F. | 30 | Diap., 1st half | ,, | Muscles | — | 0 | 9 ,, | Disease | — | 0 | Yes | 0 |
| 16 | M. | 13 | Diaphysis | ,, | ,, | 2½ m. | Amp. hip | 12 ,, | ,, | Yes | 0 | — | No post-mortem examination. |
| 17 | M. | 23 | Diap., 2nd half | ,, | ,, | 4½ ,, | ,, | — | — | — | — | — | — |
| 18 | M. | 38 | Lower third | Simple | ,, | 2½ ,, | Amp. thigh | 9 m. | Disease | 0 | 0 | — | No post-mortem examination. |
| 19 | F. | 16 | Diap., 1st half | ,, | — | 0 ,, | Amp. hip | 9 ,, | Shock | 0 | 0 | — | No post-mortem examination. |
| 20 | M. | 27 | ,, | ,, | Muscles | 3½ ,, | ,, | — | — | — | — | — | — |
| 21 | M. | 24 | Diap., 2nd half | Calcifying | 0 | — | 0 | 9 m. | Disease | — | Bronc., poplit., lumbar, &c. | Yes | 0 |
| | | | *Tibia: Round-celled.* | | | | | | | | | | |
| 22 | M. | 53 | Diaphysis | Simple | Skin | Years | Amp. thigh | Many years | Disease | 0 | 0 | — | No post-mort. examination. Tumour of forehead and of other calf. |
| 23 | F. | 17 | Upper epip. | ,, | 0 | 3 m. | ,, | 9 m. | ,, | 0 | 0 | — | No post-mortem examination. |
| 24 | M. | 26 | Upper third | ,, | — | 2 ,, | ,, | — | — | 0 | 0 | — | Well sixteen months after operation. |
| 25 | M. | 51 | ,, | ,, | Muscles | 2 ,, | ,, | — | — | — | — | — | — |
| | | | *Tibia: Spindle-celled.* | | | | | | | | | | |
| 26 | M. | 6½ | Upper third | Bone | Skin | — | 0 | 6 m. | Disease | — | 0 | 0 | 0 |
| | | | *Tibia: Mixed-celled.* | | | | | | | | | | |
| 27 | M. | 18 | Lower third | Bone | — | 7 m. | Amp. leg | — | — | † Femur | Femor. | — | — |
| 28 | M. | 20 | Upper third | Calcifying | 0 | 7 ,, | Amp. thigh | — | — | 0 | 0 | — | Well two years after operation. |
| 29 | M. | 19 | Diaphysis | Bone | Skin | — | 0 | 10 m. | Disease | — | 0 | 0 | 0 |
| 30 | M. | 24 | Upper third | Simple | Muscles | 9 m. | Amp. thigh | 10 ,, | Pyæmia | — | 0 | Yes | 0 |
| | | | *Fibula: Spindle-celled.* | | | | | | | | | | |
| 31 | M. | 29 | Upper third | Simple | Mscls. | 6 ,, | Amp. thgh | 9 ,, | Disease | 0 | 0 | | — |
| | | | *Fibula: Mixed-celled.* | | | | | | | | | | |
| 32 | M. | 22 | Upper third | Calcifying | ,, | 8 ,, | ,, | 12 ,, | ,, | 0 | 0 | 0 | In other calf and subcutaneous tiss. |
| | | | *Humerus: Round-celled.* | | | | | | | | | | |
| 33 | M. | 19 | Diaphysis | Simple | Muscles | 2 ,, | Amp. shldr. | — | — | Yes | 0 | — | — |
| 34 | M. | 19 | ,, | ,, | ,, | 3 ,, | ,, | 3 m. | Shock | — | 0 | — | No post-mortem examination. |
| 35 | F. | 27 | ,, | ,, | ,, | 4 ,, | ,, | 16 ,, | Disease | Yes | 0 | — | No post-mortem examination. |
| 36 | M. | 6 | ,, | ,, | ,, | 1½ ,, | ,, | — | — | — | 0 | — | — |
| | | | *Humerus: Spindle-celled.* | | | | | | | | | | |
| 37 | M. | 34 | Diaphysis | Cartilage | Mscls. & bone | 6 ,, | Resection | 6 m. | Operatn | — | 0 | Yes | 0 |
| | | | *Ulna: Mixed-celled.* | | | | | | | | | | |
| 38 | M. | 25 | Upper third | Bones | — | 12 ,, | Amp. arm | 13½ ,, | Disease | 0 | 0 | — | No post-mort. ex. 5 tum. of biceps. |
| | | | *Clavicle: Round-celled.* | | | | | | | | | | |
| 39 | M. | 18 | Sternal half | Simple | Mscls. | 9 ,, | Resection | — | Disease | Yes | † Cerv. | — | No post-mortem examination. |
| 40 | M. | 14 | Acrom. half | ,, | ,, | 1½ ,, | ,, | — | — | — | Cerv. | — | — |
| | | | *Lower Jaw: Spindle-celled.* | | | | | | | | | | |
| 41 | F. | 18 | Body | Cartilage | Muscles | 2 ,, | Resection | 6½ m. | Disease | Yes | 0 | — | No post-mortem examination. |
| 42 | F. | 22 | ,, | Simple | — | 1½ ,, | ,, | — | — | — | — | — | — |
| 43 | F. | 20 | ,, | ,, | 0 | 3 ,, | ,, | 12 m. | Suffocatn. | Yes | 0 | — | No post-mortem examination. |
| | | | *Ribs: Spindle-celled.* | | | | | | | | | | |
| 44 | M. | 33 | Neck | Cartilage | Mscls. | 12 ,, | Resection | — | — | 0 | 0 | — | Well nine months after operation. |
| | | | *Pelvis: Round-celled.* | | | | | | | | | | |
| 45 | M. | 41 | Innominate | Simple | Muscles | — | 0 | 7 m. | Disease | — | Pelvic | 0 | 0 |
| 46 | M. | 25 | ,, | ,, | 0 | 5 m. | Resection | 5 ,, | Shock | — | 0 | Yes | — |
| 47 | M. | 25 | ,, | Cartilage | Muscles | — | 0 | 20 ,, | Disease | — | Pelvic | Yes | Scapula, vertebra, heart, and liver. |
| | | | *Skull: Round-celled.* | | | | | | | | | | |
| 48 | F. | 21 | Multiple | Simple | — | — | 0 | 6 ,, | Disease | — | Bronch. | 0 | Both breasts. |
| 49 | M. | 17 | ,, | ,, | 0 | — | 0 | 3 ,, | ,, | — | Mesent. | 0 | Testis, kidneys, prostate. |
| 50 | M. | 19 | Base | ,, | Mcs.&c. | — | 0 | 8 ,, | ,, | — | Mediast. | Yes | 0 |
| 51 | M. | 28 | Multiple | ,, | ,, | — | 0 | 11 ,, | ,, | — | 0 | Yes | Humerus, liver. |
| | | | *Skull: Spindle-celled.* | | | | | | | | | | |
| 52 | M. | 19 | Frontal | Simple | 0 | 30 m. | Removal | 30 ,, | Collapse | — | — | 0 | 0 |
| 53 | M. | 3 | Multiple | ,, | 0 | — | 0 | 3½ ,, | Disease | — | Submax lumbar, & mast. | 0 | Lower jaw, suprarenal capsule. |
| 54 | M. | 24 | Base | ,, | Nerves | — | 0 | 14 ,, | Cerebral | — | 0 | Yes | Liver, subcutaneous tissue. |
| | | | *Skull: Mixed-celled.* | | | | | | | | | | |
| 55 | M. | 30 | Multiple | Bone | 0 | — | 0 | 24 ,, | Cerebral | — | 0 | 0 | 0 |
| 56 | M. | 4 | Frontal | Simple | 0 | 3 m. | Removal | 30 ,, | Disease | Yes | 0 | — | — |

from the operation, but in a few days began to sink, and in three weeks died—apparently not from the amputation, for the wound was well-nigh healed, but from affection of the lungs, of which symptoms had lately been evinced. The tumour for which amputation was performed on No. 13 was a calcifying and chondrifying growth, which had already existed for a year—a longer time, by full four months, than the whole duration of the former case. It seems to have been recognised after the amputation that a portion of the disease still remained in the medulla of the femur, but it was not till six months later that the new growth was actually observed. A year after the amputation of the thigh a second amputation was performed at the hip-joint, and a year after the second operation the patient died with huge masses of secondary growth in the lungs and pleuræ and three small tumours of the lining membrane of the heart. These two cases are so similar that there are only two characters in which they manifestly differ—first, in the duration of each stage of the disease, and consequently in their whole duration; second, in the nature of the tumours. The more slowly growing was composed largely of cartilage, or was calcified; the more quickly growing of brain-like vascular tissue, whose consistence was so soft and vessels so weakly walled that more than half its bulk was composed of semi-clotted blood. It is impossible to refrain from associating the greater density and hardness of the one tumour with its slower growth and late recurrence, the greater vascularity and softness of the other with its far more rapid development. This impression is, however, speedily, and perhaps happily, corrected by the instance of another tumour equally dense and hard (No. 9), a chondrifying and ossifying sarcoma. Amputation was performed in this case also when the tumour had endured a year. But when, a few days later, the patient died, both lungs were partly filled with growths of a like nature and consistence.

The cases of *mixed-celled* sarcoma occurred in patients from thirteen to thirty-eight years old. Seven affected the shaft, one the lower fourth. Only two (Nos. 15 and 21) pursued an uninterrupted course. Of both the duration was equal. In both the lungs were the seat of secondary growths, but in one the popliteal, lumbar, bronchial, and tracheal glands were also so tranformed by the disease that they retained no trace of normal structure. In its implication of the glands this tumour stands alone among the mixed-celled sarcomas of the femur. Nor is it easy to understand the relation which this glandular affection bore to the tumours of the femur. It may be that the popliteal glands were involved in its continuous growth. But the natural condition of the femoral and inguinal glands and the diseased condition of those of the abdomen, render it more probable that, as in most cases of sarcoma, so in this, the blood- and not the lymph-vessels were the channels by which the infection was conveyed.

Recurrence in the stump took place in one patient, No. 16, whose tumour, a huge mass containing many cysts or cystoid cavities, grew almost to the hip-joint, where amputation was performed. No. 14 deserves notice for the rapidity with which it spread, and, within three months of its first appearance in the thigh, filled the lungs with numerous tumours like itself. The date of its origin is almost indisputable, for the patient, a boy of fourteen years, while in what appeared to be good health, received a severe blow on the thigh from the handle of his cart on the 5th of November, 1872. The part at once began to swell, and so rapidly increased that in eight days from the injury he was unable longer to pursue his work. On the 3rd of February, 1873, he died immediately after amputation of the hip. The tumour ossifying, chondrifying, and hollowed out by large cavities filled with clear yellow fluid, surrounded the whole femur from the condyles to the lesser trochanter. Of these mixed-celled sarcomas the first four contained cavities of a similar nature, for the most part ragged and cystoid rather than cystic. And each of these four tumours was partly cartilaginous; two facts which I mention together because the second may perhaps help to explain the first, for the tendency of cartilage to soften down to a viscid or even thin clear fluid has long been recognised.

Let me also draw attention to the frequency with which bone or cartilage, or both, occurred in mixed-celled tumours of the femur. And let me at the same time point out that these ossifying or chondrifying or calcifying tumours present no other characters in common which entitle them to be classed together, and no characters which separate them from the remaining tumours of the sub-group.

# Clinical Retrospect
## OF A
# HALF-YEAR'S HOSPITAL WORK.

By MATTHEW CHARTERIS, M.D.,
PROFESSOR OF MATERIA MEDICA AT THE GLASGOW UNIVERSITY, AND PHYSICIAN TO THE GLASGOW ROYAL INFIRMARY.

## PART II.

THE various forms of heart diseases and murmurs were well illustrated by twenty-nine selected cases. There were seven cases of hypertrophy, one of which died. Here the organ was found nearly twice its normal weight, the increase being chiefly in the left ventricular wall. There was no valvular disease, and doubtless the hypertrophy was related to the kidney complication which had preceded the heart's increase.

Of three cases of pericarditis one died. There were two well-marked cases of mitral obstruction, the peculiar thrill, the limited area, and the presystolic character of the murmur being easily differentiated.

Of the more common valvular lesion of mitral regurgitant there were ten examples, and of these one died.

There were seven cases of aortic obstruction and aortic regurgitant, and of these two died, and post-mortems were permitted, which revealed narrowing in the one case, and patulency of the valve in another. There was one case of intra-thoracic cancer, diagnosed as such during life, and verified after death. The symptoms were a husky voice followed by paralysis of left vocal cord, dulness on percussion at the base of the lung, and rapid emaciation. No red-currant jelly appearance was presented by the sputa.

One case of diabetes mellitus died within forty-eight hours after admission, and an opportunity was afforded for a post-mortem examination. Nothing noteworthy was detected, although Dr. Foulis made a very diligent and accurate inspection of all the organs of the body, special attention being directed to the brain. Nothing confirmatory of Dr. Dickinson's views was observed. Previous to death the patient fell into a somnolent condition, the urine being passed involuntarily, and the breathing being stertorous. The conditions were similar to those noted in uræmia, but without the muscular twitchings and preceding headache. One diabetic patient was dismissed as irregular. The others were placed on an entirely new method of treatment, for the carrying out of which, and for many practical suggestions, I have to express my gratitude to my able and esteemed pupil and friend, Mr. Edmund A. Cook.

The plan adopted consisted in the administration of pilocarpin on the lip in 1-20th grain doses thrice daily for a fortnight. This relieved the distressing dryness of the tongue, and consequent thirst. The pilocarpin was followed by a course of the mixed phosphates—viz., of fresh bone-ash of femur, light calcined magnesia, bicarbonate of potash, phosphate of soda, syrupy phosphoric acid and water.

The cases will be reported in some subsequent paper more fully. It may, however, here be observed that the success was very striking. The urine diminished from 300 to 90 ounces, weight was regained, and the patients were enabled after four months' residence in the hospital to resume an out-door occupation. One of the diabetic patients was kindly transferred to my care by a colleague in whose wards he had been for three months without advantage either in regard to the general health or the diminution of urine. Placed upon the treatment mentioned there was decided improvement, and at the time of writing this the urine has lessened in quantity from 250 ounces to 120, and at this last point has remained stationary for some weeks.

A young woman, nineteen years of age, was admitted into the wards in a very critical condition. While waiting her turn to be examined in the out-patient department she was suddenly attacked with vomiting of blood, so copious and so exhausting that instant death seemed imminent. Ergotine was at once injected, and with excellent effect, for it seemed to stay the bleeding, and the circulation, as evidenced by the pulse, was restored in a few minutes after its administra-

tion. The ergotine was subsequently followed by gallic acid in four-grain doses every two hours for a night and a day, when all medicinal treatment was abandoned, and a carefully regulated dietary was put in force. This consisted of beef-tea injections thrice daily for nine days, while only a very little iced brandy-and-water was given by the mouth. When the thirst was excessive she was permitted to suck ice alone, but on no account was she allowed to raise herself in bed. After the ninth day an occasional teaspoonful of essence of beef was given, followed on subsequent days by milk, and, as convalescence became apparent, by dry toast. To combat the anæmia dialysed iron was also ordered. In other four cases of gastric ulcer, diagnosed by the localised pain, by the history of hæmatemesis, and by the weak, bloodless condition of the patients, the same line of treatment was adopted, and in every case with satisfactory results.

For a well-marked case of cancer of the stomach, recognised to be such by the presence of a tumour, the cancerous cachexia, and by the age (forty-five), only palliative means were employed, as Chian turpentine had not in the early part of the session come into vogue. Of three cases of acute peritonitis, two recovered; the treatment being by the calomel and opium pill. A case of lead, and another of carbonic-acid, poisoning, made good recoveries.

Of intestinal parasites there were four examples, two being those of tapeworm, and for these the usual remedies of oil of male fern, followed by castor oil, succeeded in dislodging many yards of the worm. The head, although carefully searched for, was not detected. For the two cases of ascaris lumbricoides santonin was given, and caused, as it frequently does, the expulsion of the parasite, although this was attended by great sickness, griping, and prostration.

Opportunities were afforded for the diagnosis of twenty cases of hepatic disease, including congestion, cirrhosis, cancer, jaundice, catarrh of bile-ducts, and gall-stones; and post-mortem examinations were made showing the characteristic appearances of cirrhosis and cancer of the organ.

A case of Hodgkin's disease, or lympho-sarcoma, terminated fatally, although arsenic, according to the suggestion of Billroth, was given in large and increasing doses. Death was preceded by a temperature of 103° for four days with profuse perspiration. In the preceding session there were three typical cases of Addison's disease, but this year there were none.

The treatment pursued in eleven examples of chronic Bright's disease with dropsy has been generally indicated in the previous part of the paper. In seven cases of the acute variety the treatment consisted in dry cupping over the loins, drastic cathartics (notably elaterium), and milk diet. Dr. Charteris said that experience in past years warned him against resorting to the induction of perspiration by artificial local means, such as hot air or warm bricks, in the acute form of nephritis. He had seen great distress occasioned and rise in temperature in all; while in two cases he distinctly attributed the supervention of uræmic convulsions to their persistent employment.

Diseases of the nervous system always bulk largely in hospital practice in Glasgow, and doubtless many patients are sent in because the friends are anxious to be spared the fatigue and expense attendant on careful nursing. Some of these are well worthy of observation during life; and it is greatly to be regretted that the after-death appearances cannot be observed, through the prejudice and ignorance of the relatives, exhibited in negativing, as they term it, the "opening of the body." Much valuable information is thus lost which might be conveniently utilised.

Without entering into details in all, Dr. Charteris said that out of fifty cases of what might be termed diseases of the nervous system, including acute meningitis, hemiplegia, paraplegia, locomotor ataxy, sciatica, lumbago, pleurodynia, epilepsy, chorea, hysteria, and delirium tremens, a few deserved special notice.

Great interest was attached to a paraplegic female, aged twenty-six, who had been transferred to the medical from the surgical wards nine days after an operation for malignant sarcoma of the upper jaw. A localised redness over the sacrum was detected, and, notwithstanding the most careful nursing and the employment of all known remedial means, it deepened into a purple hue, and finally became black. As this result could not be attributed in any way to the persistent pressure which causes an ordinary bedsore, the attention of the class was directed to it as being "the acute decubitus of Charcot," and the fatal nature of the malady, thus painfully and prominently illustrated, diagnosed. The friends were told of the opinion entertained, and they naturally desired she should be removed home. She died three weeks afterwards. The sore at the time of her dismissal could be covered by the palm of the hand, but it afterwards assumed more ghastly proportions; and death was attributed directly to it, and its production to the carelessness of the hospital attendants. A prolonged inquiry, extending over months, followed, and ended in the withdrawal of the charge. It is needless to say that this inquiry need never have been made had the authorities known anything about the opinion entertained and the medical treatment adopted while in the ward, and the significance attached to bedsores generally and this form of bedsore in particular, as recognised by recent important pathological observations. This information was offered, but refused. A coroner's inquest would have spared much trouble, and presumably would have enlightened official advisers.[1]

Hydrophobia, if it can be called a nervous disease, claimed two victims, who came from the same part of a neighbouring county. Pilocarpin was the remedy employed in both cases, and in the first case it was at one time hoped that the trial would have justified its selection; for the patient was a muscular athlete, tall, strong, and wiry, whose constitution was unimpaired by previous illness, and who had, as he said, "neither tasted drink nor smoked tobacco in his life." The drug lowered the temperature, promoted copious salivation and perspiration, and strange to say, the inability to swallow was entirely removed, and the gloominess that hung over the patient at first was succeeded by wild bursts of delirious joy, with fanciful pictures of happiness and peace. The struggle, fierce and terribly violent, which lasted four days, seemed to exhaust the man, and without convulsions and without terror he sank and died.

The clinical record of this case after it had been decided to try pilocarpin is as follows. At 9.45 A.M., when first seen, his pulse was 150 and his temperature 102 6°. One-third of a grain of pilocarpin was injected, and in about three minutes afterwards he began to hawk and spit profusely, and this was followed by a copious perspiration. At 11.15 the injection was repeated, causing the same symptoms, and when seen at 12, he was lying comparatively quiet, and "sweating awfully," as he said. His temperature had fallen to 101°, fully a degree and a half. His pulse being 140 at 2 P.M., the reduction of temperature was more noted, as it was 100° and his pulse was 130. At 4 P.M. he complained of severe pain in the back of his head, for which a poultice was applied. He now asked for a drink of milk. The nurse steadied his hand and assisted him to bring the cup to his head; when it was there, he threw the milk into his mouth as a man might do a pill, and swallowed it with a great gulp. After he had done this, he rose to his full height in bed and said, "I have swallowed at last. I am a cured man. I'll go home to-morrow; but don't mind me, don't mind me, when I get out." Everything was done to foster the idea that he was getting better, and he promised money and the eternal gratitude of himself and family, adding, "The vale of Leven will wonder when they see me back a cured man." At 6 P.M. pilocarpin was repeated, but the result was not the same as before, for little perspiration was induced, but instead copious micturition. His temperature had again risen to 102°, and his pulse was 160. At 9 P.M. his condition with regard to temperature and pulse was unaltered, and he talked incessantly. Bromide of potassium was given in large doses, but no sleep was obtained. At 9 A.M., when again seen, he said he had not slept, for men had come in and sat on him, bruising him much all down the back. His temperature was 102°. Pilocarpin was again injected, but little perspiration was induced. At 12, three hours afterwards, pain was experienced over the kidney, and a trace of albumen detected in the urine. He saw his wife at his own request, and to show her he was better, he took some milk with an effort, but no particular spasm. He had taken in all since his amendment two pots of Brand's essence of beef. At 4 P.M. the nurse stated he had dozed about ten minutes at a time, but he had had no sound sleep. He appeared much excited about being beaten. Later on he slept about an hour after having an egg beat up

[1] In connexion with bedsores, I have to record that the woman with Erb's spastic paralysis was recently, at my request, readmitted into the ward. She had a large sloughing sore, which was easily treated; but after she had remained a month she found, to her astonishment, that she was pregnant, and, so far as can be judged, she has now advanced to about the fifth month. The paralysis remains in *statu quo*.—M. C.

with brandy, and on awakening he took a slice of bread soaked in water and some essence of beef. During the remainder of the day and the following morning he was simply exhausted through constant talking and want of sleep, but he could swallow easily. At 9 A.M. he wished to go out, and actually reached the door, but was persuaded to return. His exhaustion was very intense, and the albumen in the urine very abundant. At noon of the same day he died.

Thinking that perhaps the pilocarpin had not been pushed sufficiently actively in this case, in the next it was given at short intervals, and with beef-tea injections. The struggle was, however, shorter here, for within forty-eight hours of his admission the man succumbed. It is peculiar as showing the nature of the disease to state that in the first case there was a thorough and intelligent appreciation of what it was; while in the other there was neither wonder nor anxiety, or even, so far as could be learned, any knowledge that the disease was hydrophobia, or that a bite received three months previously had any connexion with the ailment for which he was admitted. Dr. Charteris said that his experience now of three cases under his immediate care, and of two others which he had seen, led him to call the disease "pantophobia"; for dread of everything, from the tiniest draught of air to the most carefully muffled footstep, was as significant as the undoubted terror inspired by the thought or the sight of water. The post-mortem, conducted by Dr. Foulis, and the microscopical observations subsequently made by him and Dr. Middleton, revealed nothing which cannot be observed in any nervous disease attended with great excitement and followed by rapid death—such, for instance, as acute mania or delirium tremens. These investigations will be published. The bite in the cases mentioned was in the fleshy part of the hand, between the thumb and forefinger, and the dogs that caused the injury, so far as can be accurately ascertained, were retrievers.

Four cases of chorea were treated by arsenic in the form of Fowler's solution, given in doses varying according to age, from four to eight drops. Improvement was observed about the eleventh day, and the system was thoroughly free from the malady in four weeks, when the constitutional effects of arsenic were manifested. Cod-liver oil, iron, and a generous diet formed the after-treatment of the patients elected to remain in the infirmary. Two girls of the age of fifteen happened to be admitted with the disease on the same day and were placed in contiguous beds. One was a severe case, the other was mild. After a few days it was observed that the malady in the latter was greatly aggravated, and that she was rapidly becoming worse instead of better. This was attributed, and rightly, to the peculiarly imitative character of chorea, and the patients were separated, one being placed in a private room. This precaution was amply justified by the amendment which ensued. In almost every case of chorea, if carefully investigated, the cause is found to be "fright," although this, on an inquiry, may not be obtained from the patient, but from the mother and other relatives. In Dr. Charteris's wards for the last three years all other drugs have been abandoned, and arsenic has alone been trusted to.

Numerous cases of skin diseases were treated, including erythema, eczema, rupia, ecthyma, sudamina, herpes (labialis and zoster), psoriasis, lupus, scabies, and tinea sycosis. Of psoriasis there were nine examples, and in these chrysophanic acid ointment (one drachm to the ounce) was alone employed. In two of the cases the disease was not confined to its usual sites, but completely covered the body, literally from the crown of the head to the soles of the feet. The peculiar and specific action of the ointment was very gratifying, and in an age of medical scepticism marks an epoch of therapeutic success. A singular circumstance was noted—viz., that the acid rubbed in must have some constitutional action, for if applied only to one side of the body it seems eventually, though more slowly, to remove the scales from the other. This observation, although true in one case, was not so marked in the other, and would require further verification. Generally speaking, in psoriasis the patient's skin can be made clean and smooth in nine days from the commencement of the treatment by the acid, and when, as formerly, arsenic was trusted, it required at least six weeks, and even then the result was by no means so satisfactory.

In conclusion (Dr. Charteris said) there had been in the wards 252 patients during the session; and of these, excluding six who died twenty-four hours after admission, the mortality was twenty-four. Many of those admitted were hopelessly ill, but it seemed inhuman to remove them to the squalid misery of the homes from which they came, and they were allowed to linger amid the comparative comfort of a well-ventilated and well-nursed hospital ward. It would be easy to show a very clean bill of health and an infinitesimal mortality if the physician was foreseeing, and fatal chronic cases unfeelingly dismissed. Such fame—if it were not a desecration of the word to call it so—could only be attained at the sacrifice of conscience and self-respect. And besides, the chronic cases would form the staple of the after-practice of the students, and the knowledge acquired of the varied phases of approaching death was an inestimable boon to them, for they could tell of this to wearied watchers, and dictate little comforts during life's last hours.

They had had an opportunity of studying nearly every disease treated of in ordinary books of medicine, and in many of these they had seen how wide was the field, how hopeful the future of practical therapeutics. Clinical experience showed how few symptoms or signs were in reality significant of any one particular disease, and how slowly but surely the art of healing would be consolidated, not by physiological experiment or laboratory dreams, but by carefully recorded facts and well authenticated recoveries when the proper remedies had been judiciously chosen. They could assist much in the work, more than they at present imagined, if when practitioners they still remained students and jotted down for publication details of cases, whether successes or failures.

## THE ANATOMY AND SURGERY OF THE PERITONEUM.[1]

BY AUGUSTUS J. PEPPER, M.S., M.B., F.R.C.S.

THE serous membranes—peritoneum, pleuræ, and pericardium—are derived primarily from one common cavity, the pleuro-peritoneal. This is formed by the splitting of the ventral lamina of the middle layer of the blastoderm, the outer portion of which forms the abdomeno-thoracic wall (somato-pleure), and the inner portion the muscular and submucous coats of the alimentary canal, together with certain viscera—in part or entirely—of the thorax and abdomen (splanchno-pleure). Subsequently by the formation of the diaphragm, the pleural is shut off from the abdominal cavity; a further stage consists in the separation of the two pleural sacs and the pericardium. The lower part of the alimentary canal, it will be remembered, is derived from an invagination of the epiblast from the surface, in the same way that the buccal cavity is formed above or in front. Thus at one time the alimentary canal consists of three segments, mapped off by two septa; by absorption of the latter continuity is established. The normal remains of the anterior septum we see in the pillars of the fauces, whilst the posterior vanishes, except in certain cases known as imperforate anus and congenital absence of rectum.

I now confine myself chiefly to the consideration of the peritoneum—its anatomy, pathology, and surgery. And to simplify description I propose to make four categories. 1. Developmental anatomy. 2. Acquired pathological conditions. 3. Accidents or injuries. 4. Surgical operations.

First, as to certain points consequent on developmental changes.

*A.* The opening of the Fallopian tubes into the peritoneal space. The ducts of Müller arise in connexion with the splanchno-pleure layer of the mesoblast, their upper or forward extremities abutting on the adjacent cavity, and later on, when these become hollow, they are continuous with the peritoneum. The practical outcome of this is the possibility of fluids injected into the uterus or infective material formed there, finding their way into the peritoneum and setting up peritonitis.

*B.* The splitting of the mesoblast, stopping short of the termination of the trunk behind, the peritoneum will not reach to the extremity of the mucous canals, and so we find that the lower part of the rectum and the vagina are free

[1] Paper read before the Medical Society of St. Mary's Hospital, Nov. 20th, 1879.

from the serous covering; an explanation of the feasibility of performing numerous operations on this the most important surgical region of the body—e.g., the removal of stone, the cure of fistula, the relief from retention of urine, and, last but not least, that combination of "operative audacity and surgical triumph," the removal of a fœtus from the uterus by elytrotomy in the groin.

*C.* A process of peritoneum accompanies the testicle in its descent from the abdominal cavity to the scrotum, and this becomes obliterated to the extent of the spermatic cord, the closure usually becoming complete at from twenty to thirty days after birth (Birkett); the lower portion, however, remains open, as the tunica vaginalis testis, which may become the seat of hydrocele, hæmatocele, &c. The usual course is for the funicular part of the vaginal process to shrink, firstly at the internal ring, then at the upper part of the testis, and finally throughout its whole length; but not uncommonly it remains partially or entirely open. Let us consider the varieties that are met with. Supposing no closure occurs, then there is a direct passage from the peritoneal cavity into the tunica vaginalis, and along this a piece of bowel or serous fluid may pass, constituting congenital hernia and hydrocele respectively. We diagnose the former in many cases by the history of the sudden development of a swelling reaching at once to the bottom of the scrotum; the latter by the reducibility of the fluid, which had before occupied the vaginal sac.

There may, however, be apparent but not absolute obliteration of the funicular process, and so a possibility of irritating injections (though these are rarely required for the cure of hydrocele in the child) reaching the peritoneum—a mishap you may always guard against by applying pressure at the time over the external ring. Again, should the tube be obliterated only at the top of the testis, a coil of intestine comes down, and does so as rapidly as in the hernia congenita of Haller, and differs from it only in the fact of its being co-extensive with the cord. This is funicular hernia. Or the tube may remain open for a variable extent along the cord—although its continuity with the abdomen is broken, in this case a hernial protrusion must make its own sac, which latter becoming ensheathed by the funicular part of the tunica vaginalis, constitutes encysted hernia, or, as it is often ambiguously styled, infantile. Lastly, a small saccule may be the only deviation from the normal, and this may be the seat of encysted hydrocele of the cord.

One word about the so-called diffuse funicular hydrocele. In most text-books it is described as a serous infiltration of the cellular tissue of the cord, which I believe to be erroneous, for pressure at the internal ring would give rise to it; and were this the correct pathology we ought always to find an associated varicocele—a combination not by any means constant. It seems to me that it may be caused by two anatomical states—*a*. Fluid in the whole funicular portion of the tube, but not communicating with the cavity of the abdomen. *b*. Fluid contained in several loculi of the tube from irregular closure at several spots. It would be well to abolish the word diffuse, and to speak only of the several forms of encysted hydrocele—congenital hydrocele comprising two varieties, complete and funicular. In the female the process of peritoneum, if open, forms the canal of Nuck, and may be the seat of hydrocele or hernia.

*D.* There are several points with regard to the changes taking place in the peritoneum after birth due to alteration in shape and size of the abdominal viscera, to the growth of the pelvis, and to the stretching of certain parts of the mesentery and other folds. Two or three illustrations will suffice.

Enlargement of the spleen in the earlier stage is known to encroach on the thoracic cavity relatively more in the child than in the adult. This is owing to the pleuro-colic fold—which forms a kind of shelf beneath the spleen—becoming gradually stretched as life advances, by the distension of the stomach and colon, for this reason the enlarging spleen in the adult more readily oversteps its natural barrier.

Intussusception of the bowel commencing at the ileo-cæcal valve might with propriety be termed an accident incidental to infancy and childhood. There are two factors in its causation; on the one hand, an irregular peristalsis, with an empty state of the bowel; on the other, the anatomical relations of the peritoneum. In children the whole of the cæcum is freely slung by mesentery, in adults it is more tightly bound down to the iliac fossa. And bearing in mind that in intussusception of the bowel the part first invaginated is always the most advanced, or, in other words, that the ensheathing portion becomes involuted, we see how in children this portion of the bowel easily leaves its normal situation, stretching its moorings and carrying them with it.

The bladder in children is always to some extent in contact with the abdominal wall; in adults only when distended; for in children the pelvis is but little developed. This bears upon punctured wounds of the lower part of the abdomen, and also on the operation for stone.

As an illustration of abnormal development I may cite the case of congenital defect or absence of the diaphragm.

I pass now to the second division of the subject—acquired pathological conditions. These are practically inflammation and its results. It is strange that although the three main serous membranes have their origin in common, they differ so widely in their behaviour with regard to the common causes of inflammation, each one seeming to identify itself with the viscera with which it is connected. Thus we find that pleurisy frequently follows exposure to cold; pericarditis and peritonitis rarely, if ever, as an immediate result. Pericarditis is mainly dependent on toxæmic conditions, such as that of acute rheumatism, chronic Bright's disease, and pyæmia; whilst peritonitis is almost unknown, except as a sequence of injury, taking the word injury in its widest sense, so as to include not only direct wounds of the peritoneum from without, but in addition the irritation from physical and chemical substances that may find their way from rupture of the underlying structures, such as a hydatid cyst, gall-bladder, and abdominal viscera; as well as diseased states, spreading by continuity, such as cancer of the liver, or typhoid ulceration of the intestine. Many cases are recorded as idiopathic peritonitis simply because a more rigorous search has not been instituted. How easily a minute perforation, or a body of small size (in one case the operculum of a whelk) impacted in the vermiform appendix, may be overlooked in presence of the more staring pathological appearances. It is only recently that I demonstrated in the post-mortem room a hole little larger than the diameter of a pin in the ileum of a patient who had died from perforative peritonitis complicating typhoid fever. This probably would never have been seen had we not carefully flushed the intestine with water, and yet, small as it was, no one could entertain the least doubt as to its having been formed during life—a small, deeply-excavated ulcer on the one side, an excessive amount of lymph on the other, and the aperture itself bounded by a narrow ring of necrosed tissue.

The symptoms and pathological appearances of peritonitis vary greatly in different cases, according to the intensity of the cause, the rapidity of the process, and the general condition of the patient. Thus it may be chronic, partial, and adhesive, as when it occurs in the course of cancer and tubercular enteritis without perforation. It may be latent, as we find after the operation for strangulated hernia in old people, or where the bowel has been acutely nipped for a long time. This, instead of being looked upon as a special kind of peritonitis, should be considered simply as peritonitis in a subject with depressed vital powers. The pathological changes are going on, but the general response is feeble. Finally, we meet with cases in which the inflammation is so rapid that it assumes a purulent form from the first.

I would call attention to two of the more important symptoms of the disease. Firstly, the *Pulse*. In the sthenic form it is said to be rapid, small, and wiry; this is due to reflex contraction of the arteries generally, excited by the irritation of a large number of nerves, together with a powerfully-acting heart. In the asthenic, and in all cases in the later stages, it is rapid, small, and compressible, a paralytic condition taking the place of, or succeeding, the irritative. Secondly, *Tympanites*. This is caused by increased pressure from accumulated gases from within, and paralysis caused by inflammation of the muscular coat from without. It is curious to what extent cellulitis may spread without producing peritonitis. In a case of lithotomy performed at this hospital purulent exudation had extended from the pelvis along the course of the ureter and iliac vessels, and yet there was no peritonitis.

One result of chronic thickening of the membrane is to diminish the liability to acute general inflammation, so that the sac of an old hernia may be opened with much less risk than that of a recent one. This is an instance of the general pathological law—that slowly progressing lesions produce less marked effects than others of even less extent with

rapid onset; for the parts involved appear to accommodate themselves to their altered mode of life. Thus a tumour within the skull for a long time may give but little evidence of its existence; whereas a hæmorrhage as large as a bean may be followed directly by complete hemiplegia. Again, the prognosis in secondary amputations for chronic disease is more favourable than primary ones for accident. We gather from this the indication that major operations of expediency should not be performed on patients immediately taken from active life, but they should be confined to bed for some days prior to surgical interference.

This brings me to the third part of my subject. The peritoneum may be bruised, extravasation occurring in the retro-peritoneal tissue; this in a healthy subject almost invariably leads to absorption, but if the continuity of the serous surface be broken, and especially if the lesion communicate with the air, the danger is manifoldly increased. The treatment of a simple, incised wound consists in passing the ligatures through the entire thickness of the abdominal wall, so as to bring the divided edges of the peritoneum together, in order that the inflammatory lymph may seal the wound from within. It has been objected that the needle-punctures may of themselves set up peritonitis; but surely this possible drawback is more than counterbalanced by the advantage gained. A slight amount of local peritonitis is advantageous in order to prevent discharge from the wound if it occurs from finding its way into the peritoneum. In lacerated wounds where adhesion by the first intention is impossible, it is best to leave them freely open to admit of the escape of pus and débris externally, there being less danger than would at first sight appear of noxious matter making its way into the abdomen; remember that in the natural condition there is no such thing as a peritoneal cavity; it is only a potential space, and the atmospheric pressure on the abdominal wall tends to prevent the separation of the parietal and visceral layers. Penetrating or perforating wounds, such as a bayonet-thrust, on account of the small intestine being loosely slung by the mesentery, may happen without injury to the coils of gut, these being pushed aside by the advancing body.

There are certain portions of the viscera less liable than others on rupture to extravasate their contents into the peritoneum. The best example is the duodenum in its second and third parts; for although this portion of the bowel, on account of its anatomical relation to the spine, is exposed to greater chances of injury from blows, still as its posterior surface is free from serous membrane, peritonitis from its rupture is less likely to occur than from rupture of other parts of the gut. The same argument applies, though with less force, to the cæcum and ascending and descending colon.

Large vessels may be severed and a loss of blood sufficient to cause death may occur without there being dulness on percussion, the extravasation being found diffused widely in the sub-peritoneal tissue; and yet as a matter of routine we percuss the flanks in severe abdominal injury, knowing that if the blood be poured into the cavity of the peritoneum to a fatal extent, it will mainly find its way into the more dependent parts.

Surgical operations about the abdomen are planned where possible so as to avoid implicating the peritoneum, it being found that under these circumstances the risk is much diminished. This it is which gives lumbar colotomy the superiority over Littré's operation, in spite of minor drawbacks.

Since the introduction of a rational system of antiseptics surgeons have become less timorous and unsparing with the use of the knife. I emphasise the word "rational," because antiseptics are not infallible. They cannot prevent contagion being carried by the unwashed hands of obliging assistants, or by a forceps, on which, perhaps, cling products of decomposition of blood, &c., from a former operation. There are certain operations which must be done through the peritoneum, such as gastrostomy, for establishing a fistulous opening into the stomach; gastrotomy for relief in certain cases of acute obstruction of the bowels, and for Cæsarean section. There are more which are done behind it—e.g., the perineal, rectal, and supra-pubic operations for stone; rectal and supra-pubic puncture for retention of urine; ligature of the main arteries of the abdomen; the removal of a calculus from the pelvis of the kidney, and the removal of a fœtus from the uterus in cases of extreme pelvic deformity in lieu of the older and probably more dangerous procedure. Finally, there are the so-called tappings through the peritoneum, for ascites, for ovarian cyst, for hydatids, for excessive tympanites, and for accumulation of fluid in Douglas's pouch, the last operation performed through the vaginal wall.

One word of advice and I have done. Never pass a trocar into the abdomen without having previously introduced a catheter into the bladder, and without having made yourself sure, by percussion, that no part of the bowel lies in your path by reason of an elongated mesentery.

---

## ON IRREGULAR GOUT, WITH REMARKS ON THE PATHOLOGY OF GOUT.

By W. R. THOMAS, M.D., M.R.C.P.,
PHYSICIAN TO THE SHEFFIELD PUBLIC HOSPITAL; LECTURER ON MEDICINE, SHEFFIELD MEDICAL SCHOOL.

GOUT presents itself in so many different forms that it is often difficult to recognise it when we meet with it, and many cases of real gout are no doubt frequently overlooked because the disease has not been found in its accustomed seat.

One patient suffers from bronchitis, another from psoriasis; one may have gravel with or without albuminuria, another may have gout in his big toe. It may present itself as asthma, or again as neuralgia of the face. One may be alarmed by his having to be treated for apparent gonorrhœa, while another may have diarrhœa with piles and tenesmus—all of which diseases may be but local exhibitions of constitutional diathesis.

Frequently I have found that some of the skin diseases we meet with are entirely dependent upon the gouty diathesis. One patient had been suffering from psoriasis for three or four years, had had the usual remedies prescribed, but without success. Finding that his brother had suffered from gout, that his father had died of apoplexy, and had often been laid up with gravel, I treated the case as one of gout, and the patient gradually improved. I really looked upon this case as essentially gout of the skin, considered that the gravel the father suffered from was dependent upon the same cause, and that in all probability the apoplectic attack was owing to chalky deposit in the walls of the arteries of the brain, in consequence of which these walls were impaired, ultimately gave way, and apoplexy was the result.

I have treated several cases of eczema in the same way whenever I have been able to find that there was any tendency to gout.

A patient of mine, who had suffered for several years from severe attacks of this complaint confined to the big toe, who had been a heavy drinker, and had lived well, one night, when the pain in his toe was excruciating, was tempted to put his foot in a vessel containing cold water to relieve the pain. This did certainly relieve his pain, but soon afterwards his breathing became extremely difficult. I had to be sent for, and found that he had all the ordinary symptoms of asthma. Having been told of the manner in which he had treated himself, I naturally looked upon the asthma as dependent upon gout, and applied local remedies to try, if possible, to cause a return of the disease to the toe, but without avail. This gentleman continued to have severe attacks for two years, but he found that when he abstained from excessive eating and drinking, and took a reasonable amount of exercise, the pain to a certain extent was relieved. One day, when jumping out of a cab, he fell, and was laid up for weeks, for his old friend had returned to his big toe, took up its residence there, and frequently gave tokens of its presence whenever the owner of the toe acted unwisely.

How often we meet with patients who have suffered for days from many of the premonitory symptoms of gout, who have been, as it were, relieved of the gout by the passage of large quantities of gravel, in many instances calculi, and in one of my own cases the appearance of gravel alternated with gout in the big toe: a hint that we should treat such symptoms as gout whenever we have any suspicion of gouty diathesis, or where the habits of the patient tend to make us think that it might have been acquired.

One of my patients used to suffer from excruciating pain in the right sciatic nerve, along the greater part of its course; the attack generally lasted three or four days, and after an absence of four or five days returned. In this way he dragged on a miserable existence for three months. Finding that his grandfather had been a gouty patient and that one of his sisters had recently suffered from the same complaint, I treated this case as such with a certain amount of success. The following year he continued to pass for a considerable period large quantities of gravel, suffered from severe pain in the back, but never again from the sciatica; in fact, he became a very temperate man in every way; and I believe by so doing he succeeded in warding off the attack. I regard many of the neuralgiæ as really dependent upon the gouty diathesis probably due to the presence of chalky deposit either in the sheath of the nerve or somewhere in its course, in either case producing pain and irrrtation.

Frequently the gouty patient complains of pain in the back, and when the urine is examined, in addition to the salts, it contains albumen, a sign that disease of the kidneys is being produced by the gouty diathesis, and that there is danger of their being less and less able to perform their functions daily, more especially when deposit takes place in them, as proved after death by the appearance of white streaks of urate of soda.

I look upon gout when not hereditary as a disease invariably produced by excessive indulgence in food or drink, oftentimes accompanied by want of exercise. Excess of food by supplying excess of nitrogenous materials for the blood, tends ultimately to produce excess of urea and uric acid, which have to be expelled by the kidneys. These organs perform their functions properly for a while, but the excessive work thrown upon them for a considerable time ultimately tends, as in chronic alcoholism and disease which interfere with the action of the skin, to produce disease and consequent inefficient action of the kidneys.

Distilled spirits do not seem to produce gout to the same extent as wine, porter, and ale. Although there is a great hereditary tendency in gout, still generations do escape because the children, having seen the sufferings of their parents, sometimes have the good sense to avoid the exciting causes, and thus escape.

We know that in gout we find an excessive quantity of uric acid in the blood, and that the quantity daily excreted by the kidneys is diminished, and as we frequently find that in other diseases accompanied by excessive formation of urea and uric acid the kidneys are quite able to excrete as much as is required of them, we may safely come to the conclusion that from some cause there is deficient action of these organs, and consequent retention of materials which ought to have been excreted; for the urates, cartilage cells, fibrous tissue, and epithelial cells seem to have an affinity, and deposit in and around them takes place, producing diseases of joints, eruptions of skin, and inflammations of mucous membranes.

New deposit may take place in the kidneys, interfering still more with the functions of those organs, to such an extent that it is not satisfied now with small joints at a distance from the heart, but attacks the larger joints.

Many can indulge in eating and drinking for years, and yet never suffer from gout. In such patients there does not seem to be any hereditary tendency, or they have organs which perform their functions well, and thus the blood is not, as it were, rendered impure.

Every excreting organ in the body has certain functions to perform, and if these are not performed properly either some other organ has to do the work, or there is retention of matter for excretion in the blood, unless it be deposited somewhere, in which case it is practically excreted; in fact, every portion of the body may be said, by relieving the system of what that part requires for its nutrition, to act as an excreting organ. Even the bones by taking up certain earths act as excreting organs to a certain extent.

Now, when there is excess of hydro-carbonaceous matter in the blood, we find that there is a tendency to increase of fat all over the body. These cells, which naturally tend to take up fat, now that it is in excess, take it up in excess, showing that the presence of certain materials in the blood influences the formation of tissue.

When the kidneys act imperfectly, and there is consequent retention of certain materials in the blood, these are taken up by cartilage, fibrous tissue, and epithelial cells, and produce gout.

Sheffield.

## NEUBER'S BONE DRAINAGE-TUBES.

BY GEO. GRANVILLE BANTOCK, M.D., F.R.C.S. ED.,
SURGEON, SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.

IN the paper which led to the discussion on antiseptics at St. Thomas's Hospital in December last, Mr. MacCormac first in this country drew attention to the use of Neuber's decalcified bone drainage-tubes. At that time I was about to remove a breast, and after carefully going through Neuber's paper I determined to try his tube. Accordingly I procured from Krohne a set of tubes prepared as the author directs, and in using them strictly followed his practice. That case was published in THE LANCET along with another of excision of the sac of a femoral hernia. Since then I have used the tube in a second extirpation of the breast, and the result has been uniform in all these cases. The first two tubes were made from ox bone, and the third from ivory.

Dr. Newman of Stamford has recently briefly referred to two cases in which he had used these drains. His object was to express his disappointment, for he said the tubes became flattened, collapsed, and blocked, and serum accumulated. He omitted to say what ultimately became of them. I have heard of another case—excision of the mamma—done under strict Listerism, in which, owing to the occurrence of erysipelatous inflammation, the tube broke down, and the pieces could only be got away with considerable difficulty. With such experience I am in a better position to give an opinion on this subject.

Neuber tells us that the bone drain inserted in a fresh wound remains for twenty-four hours without any material change. Then its surface loses its smoothness, and the walls gradually become thinner. On the fourth or fifth day the walls are partially perforated, and so thin that they can no longer resist the pressure of the surrounding tissues, and the tube gets flattened. Absorption then goes on more quickly, and after the sixth day only a gelatinous body remains, of which no trace can be found on the tenth day. The quickness with which a tube is absorbed is not in all cases alike. It depends on the individual energy of the local action; placed in a gangrenous wound it is hardly absorbed at all, whereas in a healthy granulating wound that process is very rapid.

As I have already said, the results in the cases in which I have used this drain have been uniform, so that the description of one may serve for all. The tube was blocked on the second day, and as far as I could make out the blood-clot within was already undergoing organisation. Moreover, the tube was fixed, and would not yield in the slightest degree to a moderate pull. On the fourth day the projecting part of the tube had dried up, and was cut off. After this the skin soon closed over the end. But the enclosed part of the tube could still be felt of its original length, and flattened. This was the state of things in the first patient when she left the hospital at the end of twenty-seven days (her stay was protracted by an attack of menorrhagia arising from the existence of a fibroid tumour of the uterus); and the adhesion to the skin was so strong that the tube could be freely moved about with it. A month after the operation, in the second case, the tube had undergone no diminution, and in the third case—a breast case—there was no perceptible change when she was examined after the lapse of two months, and the ends of the tube could still be seen projecting under the skin. In all these cases union was absolutely by first intention, without the slightest blush throughout the length of the wound. The first and second operations were done under the spray, but in neither of them was the raw surface washed with the 1 in 20 solution. In the third case the operation was done without the spray. But as a solution of phenol (1 in 60) was used for the sponges and instruments, care was taken to prevent the access of more of the antiseptic than was unavoidable. Of the two breast cases the latter was the more satisfactory in the matter of discharge, the thymol gauze, after the first dressing, presenting a mere stain not larger than a penny piece.

Now, how is this difference in the results reported by Neuber and myself to be accounted for? Neuber says the tube is absorbed. I cannot but think that in this he is in error, and that he has mistaken for absorption the gradual solution of the material during continued discharge.

In one breast operation I had to scoop out a lot of enlarged glands from the axilla, and I employed two skeins of catgut for the drainage. As the healing went on, although the skin presented its natural appearance, there was a considerable serous discharge, and the separate strands of the catgut evidently underwent a process of solution. This free serous discharge is characteristic of Listerian treatment, and I attribute its occurrence in this last case to the action of the strong carbolic acid (5 per cent.) solution with which I washed the cut surfaces. Here then, it appears to me, we have a satisfactory explanation of the point of variance between Neuber and myself. In my practice the discharge is trifling, after the immediate oozing has ceased, and the tube remains incorporated in the wound. With Neuber it is melted down and washed away. The strong solution is used, the cut surfaces acted upon are cauterised and have a whitened or greyish appearance. That is to say, they are covered with a film of coagulated albumen, which is nothing more than dead matter, and, impregnated as it is with a powerful irritant, must come away in great measure in the form of discharge. This is the peculiarity of Listerian wounds, and hence the necessity of Listerian drainage. It may be true that without the drainage the germs are destroyed, but the mischief done mechanically by tension from pent-up fluid would be as disastrous as anything occasioned by living organisms.

Why this inconsistent cauterisation should be put forward as essential to perfect Listerian practice I have always been at a loss to understand, seeing that a solution of half the strength is considered sufficient to cleanse the instruments, and for the spray. Surely, if the germs on the hands, instruments, and sponges succumb to a solution of 2½ per cent., it cannot be necessary to kill a part of the raw surface with a 5 per cent. solution to involve the few germs that may be there in the catastrophe. It is not maintained that the external germs—the spongeal, instrumental, manual, imported, vagabond germs—are in any way different from the germs in the wound, the colonised germs; so that if 2½ per cent. is enough for the one, 5 per cent. must be too much for the other; or if 5 per cent. be the true germicidal proportion, the germs in the 2½ per cent. spray may still dance and be merry as motes in the sunbeam. Five per cent. either is or is not necessary: if necessary, the spray is a mockery; if not necessary, the wound treatment is bad surgery. It looks as if there were no escape from the horns of this dilemma.

The conclusions, then, that I have to draw with regard to the bone drainage-tubes are—1st, that they may be used without any immediate mischief in cases where they are wanted only for a short time; that is, in cases where there is a discharge only for the first few hours after operation. But in my experience there is even then this disadvantage, that with rapid union they remain encased and unabsorbed too long, and in that condition they generally cannot be said to do any good, and they may do harm. Time will show this. 2. When, however, from the nature of the case or the germophobic strength of the dressings the discharge is expected to be copious, and to continue for several days, the bone tubes are wholly inapplicable; hence it need excite no surprise that in Neuber's ovariotomies their use was "disastrous." For the drainage after this operation the glass tube must hold its own against all comers.

Granville-place, Portman-square.

## TWO CASES OF MYXŒDEMA.

BY THOMAS INGLIS, F.R.C.P. ED.

So few cases of myxœdema have been recorded in the medical journals that it is clinically important to note a short account of them as they occur, as this form of disease is somewhat uncommon, is insidious in its symptoms, and its treatment hitherto difficult and unsatisfactory. The morbid condition was first pointed out by Sir William Gull in an article on "A Cretinoid State supervening in Adult Women,"[1] and was subsequently more fully described, and its pathology partly elucidated by Dr. Ord to the Medical and Chirurgical Society of London;[2] while cases have been observed by Drs. Duckworth, Sanders, and Savage.[3] Its most prominent feature consists of a jelly-like formation in the subcutaneous areolar tissue, which gives the patients a stolid, puffy appearance, approaching that of the cretin. Their appearance is suggestive of the dropsy of recent renal disease and the passive anasarca in cardiac complaints, but we find the urine usually normal till the termination of the illness, and the heart is also healthy. All the patients hitherto observed have been females, except a doubtful male case under the care of Dr. Savage. I will give a general outline of two cases at present under observation.

T. W——, a plumber, of temperate habits and good general health, became depressed in mind owing to his wife's bad conduct, and was admitted to an Asylum, labouring under melancholia, with strong suicidal tendencies, when the following particulars were ascertained. There was no hereditary predisposition to insanity or other neurosis, and he had two healthy children. He had taken a large dose of laudanum with suicidal intent, and required the application of remedies and artificial respiration when admitted. He answered questions in a confused way; stated he wished to take away his life.

In three months he made a recovery from the melancholia, but was observed to be slightly enfeebled in mind.

When the first symptoms made their appearance, a general swelling, affecting principally at first the eyelids and hands, and afterwards extending over the extremities and body, gradually and insensibly came on. This swelling was first noticeable about the face, where the skin of the eyelids became puffy, wrinkled, and waxlike, widening the nose, and causing a general blurring or obliteration of the facial expression, and giving it a flattened, cretinoid aspect. The nose looked levelled down, the lips were thick and heavy, the lower one protruding. The tongue looked too large for the mouth, but was not œdematous, while the interference with the function of speech was very evident, articulation being slow, indistinct, and paretic. The mode of speech resembles that of the hemiplegic, and the thickened articulation of the epileptic, and was most affected in the morning. The hands got much enlarged and "spade-like," and he complained of their being stiff, cold, and numb. On pressure over the front of the tibiæ, where the œdema was considerable, there was no pitting. The urine contained no albumen; sp. gr. 1015. The heart's action was slow and laboured, but the sounds were healthy. The surface of the body was always cold to the touch. Temperature in axilla, 95°. He never felt warm even in the hottest weather. All over the skin is dry and brawny, and its sensibility is slightly impaired, somewhat resembling sclederma. Although the skin is dry it is often subject to short-lived perspirations. There are no reflex contractions on tickling the soles of the feet. There is no atrophy of the muscles, but the grasp of the hands is feeble, chiefly from inability to flex them. There is an absence of excitability of the muscles of the legs and arms. On faradising the muscles of his face only a slight response (Weiss, fifty cells) was obtained in them. On applying the electrode of the intermitted battery current to his scalp, where there is little œdema, there is strong reaction, and he then says he sees flashes before his eyes.

The fact that the faradaic contraction of the muscles where the œdema was marked is much impaired would point to a degeneration of the nerve-tissue at the periphery, as it is known that the normal excitability of the muscles is retained after gross lesions of the central ganglia, as in hæmorrhage or softenings; while, after an injury to a nerve, such as the sciatic, there is no electrical response. On the other hand, that there is no atrophy of the muscles militates against the theory of peripheral nervous degeneration, and it is probable that the myxœdema presents a mechanical obstruction to the stimulation of the nerve endings. The helplessness and slow mobility appear to be due more to the mechanical obstruction of this mucoid degeneration than to defective innervation. He presents a blown-up, water-logged appearance, and waddles like a duck when walking. The appetite is usually very bad, and he can go without food for days and not feel hungry. When he does eat, the food tastes badly to him. Bowels are constipated. He has become rather deaf, while sight and smell remain good. He has become very lethargic, and sleeps a great deal. The mental characteristics are now slight enfeeblement; memory slightly impaired as to recent events. In the mind, as with the body, the period of activity is over, and his small routine duties are performed in an automatic, listless manner.

[1] Clin. Soc. Trans., vol. vii. [2] THE LANCET, Oct. 18th, 1879.
[3] Journal of Mental Science, Jan. 1880.

BEST COPY AVAILAB

The second case is that of a woman, aged thirty-nine, of good general health, the mother of eight healthy children. She comes of neurotic stock, with an hereditary predisposition to insanity and other neuroses. Her mother died of apoplexy, and a sister was treated in an asylum for puerperal mania. Her illness came on five years ago, at the same time as an attack of melancholia, and was attended with perversions of the special senses. She said everything smelt of gunpowder. She presents the same bodily symptoms as T. W——, but in a lesser degree. Her mental condition is now permanently impaired. Three years ago an attack of mania followed the melancholia, and she had to be sent to an asylum. There she expressed many changing delusions, as that she was a queen, and sent to Edinburgh Castle for an escort to take her to Leith Fort. Sight is good, but the senses of smell and taste are impaired. She alleges that she smells snuff in her food, and that it tastes like poison. Numerous warty growths are scattered over her arms. Like the man she feels worst in the morning, when, she says, she can hardly see. The urine is natural, sp. gr. 1010. The heart's action is regular, the second sound being sharp and accentuated.

Her natural temperament was amiable, but she is now irritable, passionate, and sometimes violent without cause. Is becoming demented, is silly and childish in conversation, and frequently talks incoherently to herself. There is loss of that important faculty, the attention, and the judgment is warped, but the memory is still tolerable, and her affection for her children remains.

That the central nervous system is largely involved in myxœdema seems unquestionable, as in all the cases on record mental disturbance in some degree has been observed, ranging from perversion of the affection, irritability, slight depression, and loss of enjoyment in life, to aggressive mania and fatuity.

It appears to be a general progressive disease, which distinguishes it from simple sclederma.

Post-mortem examination by Dr. Ord revealed a general œdema of the subcutaneous areolar tissue, which was composed largely of mucin and not of serum. It was also found in the internal viscera. The arteries of the brain were much degenerated and atheromatous, but the microscopic cerebral structure does not appear to have been fully examined. Where the extremities of the cutaneous nerves were observed, it was seen that they were enveloped in a soft transparent substance, so as to be padded and removed from the ready operation of incident impulses, tactile, thermal, or chemical.

When fluid accumulates in the subcutaneous areolar tissue we have a tense shining skin, pitting on pressure, and making its appearance in the lower extremities. When from impoverishment of the blood or pressure on veins we have dropsy, the œdema at first is not stationary, but is altered by position. In myxœdema we have the reverse. Sclederma differs from it in being a sclerosis of the areolar tissues, and not an elastic mucoid change, but a limited indurated change unaltered by compression.

Although mental disturbance or aberration in some phase exists in all cases, the disease does not necessarily lead to insanity when it supervenes. This is possibly due more to the individual temperament or constitution of the patient than to the *materies morbi*, and in this particular it resembles many lesions and injuries of the brain, which frequently but not inevitably cause mental disorder. Its characters are so varying that it does not follow any typical course, but generally the lethargy and heaviness of the body find a reflex in the inactive and torpid mind. While the delusions and perversions of the special senses in the case of Mrs. H—— are undoubtedly attributable to disordered brain function, the occasional profuse perspirations are also the indication of a failure of nerve power, and, like phthisical sweating, are due to the defective innervation of the nerves controlling the sweat-glands.

The irritability and mental excitement noticed in the first stages are probably the resultant of the action of poison on the cerebral convolutions, as when poisons act on the intelligence, such as alcohol or opium. There is first a high stimulation and sur-excitation, and ultimately derangement of the intellectual functions.

In some cases the departure from the normal mental state at the onset of the disease is marked more by a change in tone than by an actual state of insanity. The man feels ill, loses his sense of well-being, spontaneity; he feels uncomfortable, irritable, and listless—a phase of mild melancholia. The changes come on slowly and insidiously; the alteration is noted first in temperament and disposition.

Dr. Ord is uncertain whether this mucoid change is a new product, the result of a disordered nutrition, a degeneration altering the function of the supreme cerebral centres, or a retrograde metamorphosis to a lower type, such as cretinism. Certainly the mental and bodily symptoms show a marked filiation to this disease.

I look upon myxœdema as primarily a nervous disease, and that the grosser changes in the skin and viscera are caused by deficient absorptive action of the lymphatics, the result of trophic changes in the cells of the higher ganglia.

The treatment of the disease has hitherto been very unsatisfactory, and the administration of nervine tonics, galvanism, and baths appear to have no beneficial effect, either in favouring the absorption of the deposit, or checking the progress of the disease, and at the best exercise only a palliative influence.

Deeping St. James.

## ANTISEPTIC MIDWIFERY.

By WALTER VERDON, F.R.C.S.

THE following case is, I think, of interest in showing the value of Mr. Lister's treatment applied to midwifery.

Lately I have used antiseptics in ordinary midwifery cases, and with marked benefit. The discharge ceases sooner and does not become offensive. In some cases this disappears entirely during the first week. It is necessary, however, in order to obtain a good result, to guard against the admission of septic air both during and after confinement—to view the uterine and vaginal lesions in the same light you would the wound made in a subcutaneous operation, and as carefully protect them from septic influence.

In the case I quote below, the patient was exposed to the poison of erysipelas both during and after labour; and though she had a slight attack of cutaneous inflammation accompanied with fever, the uterine wound remained intact; the poison having no more influence upon it than it would have upon a wound caused by subcutaneous rupture of a muscle.

Mrs. T——, weak and anæmic, at full time, had suffered from frequent pains for two days. She had not sent for assistance because she did not think the labour far enough advanced, but now felt so exhausted she wished for help. The os was now fully dilated, membranes ruptured, head above the brim, pelvis roomy, pains frequent and short; the head descended with and receded after each, making no progress; pulse 98, weak and compressible; the patient was much exhausted. I then determined to use the forceps, and also to take every antiseptic precaution.

I syringed out the vagina with warm carbolised water; also had a small basin of carbolised oil at hand for the instruments, hands, &c., and to anoint the labia and adjacent parts. All vaginal manipulation was performed beneath the spray, and with very little traction the child was born. The after-applications were diapers soaked in carbolised oil and carbolised tow, and an injection of carbolic lotion three times daily.

On the second day after confinement I found the nurse was suffering from an acute attack of erysipelas of the face; she told me she was feeling ill and her head felt tender the day before the confinement. She had slept with the patient on the night of the labour and on the following night.

On the third day the patient complained of sore-throat. Pulse 120; temperature 102° F. Vaginal discharge free from putrefactive smell; urine clear and copious.

On the fourth and fifth days the patient felt very ill and complained of pain in the right leg. Her tongue was coated; pulse 120. Still the vaginal discharge was going on satisfactorily, but there was a patch of cutaneous inflammation on the right thigh from the buttock extending almost to the knee.

On the sixth day the discharge ceased and did not return.

The pulse remained above 100 until the eleventh day; the redness disappeared on the eighth day.

The child also was the subject of an unhealthy ulceration round the umbilicus, preceded by a superficial inflammation extending to the groin.

Both the child and mother made a good recovery.

Brixton-road.

Y AVAILABLE

# A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

## MIDDLESEX HOSPITAL.

### TUBERCULAR PERITONITIS IN AN ADULT; NECROPSY; REMARKS.

(Under the care of Dr. FINLAY.)

MARGARET F——, aged thirty-four, married, was admitted on Oct. 1st, 1879. She had been an inmate of the hospital for a fortnight in June, under treatment for pleurisy, but with this exception she had enjoyed fair previous health. She was one of a family of twelve, all of whom, with the exception of herself, had died young—one at the age of nine months of "water on the brain," and another of consumption at the age of seventeen. Her own family consisted of five, all apparently healthy. Twelve days before admission her abdomen began to enlarge and to be painful and tender, especially over the hypogastric region. She had been troubled by cough since leaving the hospital in June, and she had lately lost much flesh.

On admission she was emaciated, and had a pale, earthy face and anxious expression. She complained of enlargement of the abdomen, and pain which was referred chiefly to the iliac and hypogastric regions. She was troubled also with frequent cough, accompanied by froth and mucopurulent expectoration, as well as with frequent and profuse menstruation. The temperature was 102·6°, pulse 108, and respiration 27. Her abdomen was uniformly enlarged, measuring at the level of the umbilicus thirty-five inches in circumference, and was everywhere tender on pressure. There was dulness in the flanks, shifting with change of position; and the superficial veins were prominent, but there was no ascitic wave. The areas of the liver and the splenic dulness appeared normal. In the chest, the percussion and auscultation signs were fair over the right side, but resonance was impaired over the upper half of the left lung posteriorly, and the breathing at this spot, as well as in front, was bronchial in character, and the expiration was prolonged. About the middle of the left back the breath-sounds were tubular, and were accompanied by crepitation. The heart-sounds were normal. The urine had a specific gravity of 1020, and was free from albumen. Uterine examination failed to detect any cause for the menorrhagia.

On Oct. 11th it was noted that the abdomen was more tense and shiny, measuring thirty-six inches at the level of the umbilicus. A week later the cough was more troublesome, and crepitation was more distinct over the left back, extending to the base, while moist sounds of very fine quality were heard also at the right base posteriorly. There was also a sense of fluctuation felt across the abdomen.

During her stay in the hospital she had frequent attacks of vomiting and diarrhœa, the stools being watery and dark in colour; the abdominal pain and tenderness persisted, and the woman was often delirious in the night. Her evening temperature ranged from 99·2° to 102·4°, and she gradually sank and died on the twenty-first day after admission.

The following is a note of the post-mortem examination made by Dr. Coupland twenty-one hours after death. Abdomen distended; numerous lineæ atrophicæ in skin of abdomen. On opening the abdominal cavity, the liver, considerably enlarged, was found adherent to parietal peritoneum, and the intestines, matted together, were also adherent, but the adhesions could be separated. The peritoneal cavity contained four pints of blood-stained fluid, most of it lodged in the lower third of the cavity, but some also was contained in loculi between and around the intestines. On carefully detaching the coils of intestine from one another, their serous coats were found to be everywhere thickly covered with granulations. In addition, there were numerous and extensive patches of extravasated blood on the intestines, as well as beneath the parietal peritoneum. The stomach was large, its mucous membrane thick and soft; the walls of the lower end of the œsophagus for two inches presented a blackened and softened appearance (from post-mortem digestion). The mucous membrane of the intestines was generally pale, but was nowhere ulcerated. The liver was large, but not increased in weight; portions of it floated in water; it was pale, of a yellowish colour, of greasy appearance, and extremely friable in all parts. The spleen was pale and soft; and the kidneys were tough and engorged, with some adherence of capsules. The heart contained soft gelatinous clot in the right cavities, and the mitral valve was slightly thickened; it weighed only 7½ oz. The right lung was adherent, pigmented, slightly emphysematous, and congested posteriorly. The left lung was very firmly adherent, occasioning much difficulty in removal. The upper fourth of the lower lobe was consolidated, presenting on section a dark greyish-black appearance. In the midst of the altered tissue were some small, irregularly-shaped vomicæ, which were full of puriform secretion. The right lung weighed 17 oz. and the left 20½ oz.

*Remarks by* Dr. FINLAY.—It seems proper to call the foregoing a case of tubercular peritonitis, because although doubtless secondary to destructive disease of the lung, the abdominal symptoms were those chiefly complained of, and the brunt of the disease was borne by the peritoneum. Tubercular peritonitis in the adult is by no means a common disease. By this it is not meant that a certain amount of tubercle of the peritoneum is not found frequently in bodies that have succumbed to phthisis; but in such cases there is commonly found more or less tubercular ulceration of some part of the intestines, and the peritoneal tuberculosis is seen to be secondary to the lung disease not only in point of time, but also in respect of symptoms and importance. In the latter respect, at least, the case above recorded presents a different aspect. The case was further interesting from its extreme clearness as regards diagnosis. The personal history of the patient, no less than her family history, together with the physical signs detected in the lungs, rendered this a matter of great ease and certainty.

## SHEFFIELD GENERAL INFIRMARY.

### COMPOUND COMMINUTED FRACTURE OF THIGH; RECOVERY.

(Under the care of Mr. JONATHAN BARBER.)

FOR the following notes we are indebted to Mr. Charles M. Goyder, late house-surgeon.

J. H——, aged forty, a forger, was admitted December 6th, at midnight, suffering from injury to thigh.

Whilst intoxicated the patient attempted to cross the street, and was knocked down by a tramcar, the wheels of which passed over his left thigh. He was pale, and collapsed; his face disfigured and contused; the pulse small and regular; skin cold and sweating. The left thigh was much mutilated. In the upper third there existed a perforation the size of a penny piece, and in the lower third a large rectangular skin-flap was separated from the subjacent muscles, and the thigh-bone was fractured at the junction of the upper and middle third, obliquely from behind downward to forwards. The finger placed in the wound detected a number of comminuted fragments. The upper circular wound seemed to have been produced by the protrusion of the upper fragment through the soft parts. In addition to these injuries, the femoral artery was completely detached, pulsated, and was apparently enclosed in its sheath. The limb below was cold, but sensation was present, and the tibial arteries pulsated.

Mr. Barber saw the patient shortly after admission, and decided to allow reaction to set in before doing anything.

On Dec. 7th the patient's condition was better; the pulse was quick, and there was not much pain. The foot was warm and the sensation good. In consultation it was determined to treat the case antiseptically, amputation so high up being considered as well nigh hopeless. Accordingly the wounds were syringed with a 5 per cent. solution of carbolic acid, and the limb was dressed under antiseptic spray. Two drainage-tubes were inserted, the contused flap before noticed was stitched up, and an outside long splint was applied. Evening temperature 102° F.

Next day the wound was dressed and looked well. Pulse 120, tongue dry. Temperature 103° F. On the 10th the wound was dressed again; the skin-flap was sloughing, but otherwise the wound looked healthy. A bruise of violet tint

surrounding the thickness of the thigh, indicated the place at which the wheel passed over the limb. General condition good; temperature 102° F. On the 15th he was doing well; there was a plentiful discharge, which was becoming purulent, but was quite sweet. On the 16th the femoral artery was felt beating strongly in the wound; and on the 20th there was considerable bleeding from a branch of femoral artery, which was exposed and ligatured. The general condition was good. On the 27th the limb, which had been dressed daily, was placed on Dr. Heath's (of Newcastle-on-Tyne) splint.

On Jan. 11th, 1880, the patient expressed himself as being much more comfortable in the new splint. The wound was healing slowly, and the pulsation in femoral artery was less. The general condition was much improved.

From this time the wounds gradually closed, and the discharge diminished; the patient's general condition became daily more comfortable, the appetite was good, and the pulse regular and good.

From Feb. 2nd the limb was dressed at intervals of three days.

On May 13th two necrosed fragments of bone came away, and the splint was taken off, and the limb was laid between sandbags.

On June 25th there was good union, with three-quarters of an inch shortening. The wounds had contracted into sinuses, and the femoral artery appeared to be thrombosed at the seat of injury. The general health of the patient was extremely satisfactory.

## TYRONE COUNTY INFIRMARY.

### CASE OF STRANGULATED FEMORAL HERNIA; OPERATION WITHOUT OPENING THE SAC; RAPID RECOVERY.

(Under the care of Dr. EDWARD THOMPSON.)

JAMES F——, aged fifty-five, a delicate, decrepit-looking old man was admitted on May 15th, 1880, suffering from great sickness, with violent pain in the lower part of the abdomen. The day previous to his admission he was making some unusual exertion when he experienced a sudden pain in the abdomen as if something had given way, and was almost immediately seized with sickness and a feeling of faintness. He sought advice at the dispensary of the district, and was there recommended to the hospital.

On admission the face was pale and anxious, the pulse fluttering and very feeble, and the extremities were cold. There was constant vomiting, together with pain on pressure, over the lower part of the abdomen. The bowels had not moved since the previous day. Temperature 99°; urine diminished in quantity. In the usual situation a very small femoral hernia was readily detected. Taxis having proved ineffectual, it was determined to delay operative interference no longer.

The patient was accordingly put under the influence of ether, and the operation was done with the usual antiseptic precautions. The skin over the hernia was incised, and the structures overlying the sac were then carefully divided on a director until the sac was reached. The nail of the index-finger was then introduced under the edge of Gimbernat's ligament, and the stricture freely divided with Cooper's knife. The intestine was at once reduced, and a drainage-tube was inserted, and the edges of the incision were brought together by three silver wire-sutures. The wound was then dressed antiseptically, and the patient removed to his bed feeling much relieved.

After the operation all sickness ceased, and rapid reaction from extreme collapse set in. The extremities became warm, the pulse quickly improved, and the peculiar anxious expression of countenance soon faded away. The patient was ordered a grain of opium every fourth hour, and small quantities of milk frequently.

The morning after the operation the temperature rose to 99·5° F., but in the evening it was normal, the bowels having acted of themselves in the meantime. In a week the patient was out of bed, and the wound was quite healed.

*Remarks by* Dr. THOMPSON.—I have had many cases of hernia requiring operation, but unfortunately hitherto at least 50 per cent. of them have proved fatal; nor is this percentage, large as it undoubtedly is, in any way remarkable, for I feel convinced that if the statistics of operations for strangulated femoral and inguinal hernia were fairly recorded, the unsuccessful as well as the successful, the mortality would at least reach the percentage I have stated. This excessive death-rate can, without doubt, be accounted for—first, owing to the common practice of opening the sac; and, secondly, the non-employment of Lister's antiseptic precautions. The case just recorded seems to demonstrate the advantages resulting from both these proceedings. There are of course cases which require the opening of the sac; for instance, where the hernia is an old one, and the strangulation has existed for many days, or again, if the intestine is gangrenous. In the former case there may be bands within the sac itself, binding down the intestine, and keeping up the symptoms of strangulation, even when the stricture has been freely divided. In the second case the sac must be opened in order to incise the gangrenous intestine for the purpose of forming an artificial anus. There can, I think, be no doubt that the modern practice of not opening the sac in recent cases of strangulated hernia is the right one.

# Reviews and Notices of Books.

*Practical Lithotomy and Lithotrity: or an Inquiry into the best modes of Removing Stone from the Bladder.* By Sir HENRY THOMPSON, F.R.C.S., Surgeon Extraordinary to His Majesty the King of the Belgians, Emeritus Professor of Clinical Surgery, and Consulting Surgeon to University College Hospital, &c. &c. Third Edition, considerably enlarged. London: J. & A. Churchill. 1880.

THE worth of this treatise has been so well and long recognised that the work of a reviewer of a third edition of it is considerably simplified. Sir Henry Thompson's views, too, are tolerably generally known, for his annual course of lectures at University College Hospital and communications to our columns and various societies have enabled him to publish the fruits of his increasing and extensive experience. Although the whole of the work has been carefully revised and in several parts enriched for this edition, the chapters of most interest are that in which Bigelow's operation is discussed, and the final one, in which is a record of 500 operations for stone in cases of male adults under the author's care; such a table has never before been compiled by any surgeon. As we have recently drawn attention to Sir Henry Thompson's views on Bigelow's operation, as he expressed them at Cambridge, and as a *résumé* of the table of cases was presented to the Medico-Chirurgical Society two years ago, and commented on by us then, we need not notice them at length now. Suffice it that this edition is far more valuable to the practical surgeon than the last, and well worthy of the reputation of its accomplished author.

*Leçons Cliniques sur l'Uréthrotomie Interne faites à l'Ecole pratique de la Faculté de Médecine de Paris.* Par le Dr. DELEFOSSE, et recueillies par E. PIOGEY. Paris: J. B. Baillière et Fils. 1880.

M. DELEFOSSE is an ardent advocate for the operation of internal urethrotomy, and in these five clinical lectures he has given forcibly and well "reasons for the faith that is in him." He regards dilatation as *par excellence the* treatment for stricture of the urethra; but in very nearly all cases in which it is impossible or difficult to carry it out, or in which it fails to give a thoroughly good result, he considers internal urethrotomy to be the best plan to be adopted. The use of caustics, which so long held their place in France, he rejects altogether, and he has nothing good to say of "rupture" or "forcible dilatation." He follows Civiale, Candmont, and Thompson in preferring a urethrotome cutting from behind forwards to one acting in the opposite direction. Delefosse does not look upon urethrotomy as a mode of cure of an organic stricture, and he is at pains to point out what are the conditions most favourable to a slow recontraction of the strictured part. In his opinion they are, first, a complete division of the stricture tissue at one point; second, the ex-

istence of a layer of healthy elastic, supple, spongy tissue between the bottom of the wound and the fibrous sheath of the corpus spongiosum; and thirdly, the absence of inflammation in and around the wound, the occurrence of which is apt to cause a more rigid and contractile cicatrix. His after-treatment differs from that of English surgeons who have given most attention to this operation; for the first twenty-four to forty-eight hours he ties in a good-sized catheter, through which he allows the urine to drain continuously; by the end of this time the wound is glazed over, and the danger of urinary infiltration and the risk of primary adhesion of the lips of the wound avoided. After this he leaves the urethra quite alone for two or three weeks until cicatrisation is complete, and then he completes the treatment by careful catheterisation. He points out that for any given case once urethrotomy, always urethrotomy. If recontraction occurs dilatation is of no avail to overcome it, but a repetition of the operation is necessary. There can be no doubt that internal urethrotomy is becoming more and more firmly established as a sound surgical procedure, and we think that its popularity is deserved. It is founded on correct principles, and promises to maintain its place. It is therefore especially desirable that it should be thoroughly understood and appreciated by the general surgeon, and that its performance should not be left in the hands of specialists alone. These lectures are, we believe, very honest, plain, and useful, and we welcome them as a practical contribution to a subject which, while attracting a good deal of attention now, is destined to do so far more in the future.

---

*Fracture of the Patella. A Study of One Hundred and Twenty-seven Cases.* By FRANK H. HAMILTON, A.M., M.D., LL.D., Surgeon to Bellevue Hospital, New York, &c. New York: Chas. L. Bermingham & Co. 1880.

DR. HAMILTON has chosen to study first all the cases of fracture of the patella that have come under his own care, and to those he has added all others that have been treated by his colleagues in the Bellevue Hospital of New York. He has not attempted to collect cases from all sources, and avail himself of all published experience; his object having been to study the general causes, course, and result of this fracture. A wider research would no doubt have given him a number of unusual cases; but taking the complete experience of one large institution, he has been able to avoid one of the most common statistical errors, and to present us with more trustworthy data. He is careful to point out that very many of the cases in which there is direct injury to the joint are really fractures by muscular force, and states that this is shown not only by a careful consideration of the history of these cases, but also by the fact that it is impossible to produce a transverse fracture of the patella by direct violence to the cadaver. Dr. Hamilton disapproves of Malgaigne's hooks and Dr. Hector Cameron's operation of suturing the fragments, but recommends a simple apparatus of his own, in principle like the simple inclined plane. He considers close fibrous union as the object to be aimed at, and remarks that bony union, even if possible, is not so strong as the ligamentous. In his experience refracture, or rather fresh separation of the fragments, has occurred in nearly every case quickly after the original accident, and he urges that great care should be taken to prevent its happening for three months, but after that its occurrence may be disregarded. Dr. Hamilton deprecates the employment of force in overcoming the anchylosis of the knee usually resulting, and recommends the joint to be slowly and carefully brought into use, and speaks of two years as the time in which the recovery may be looked upon as complete. Dr. Hamilton is too well known in this country as an authority upon fractures to require from us any support or recommendation. This *brochure* is good work carefully and honestly done.

---

*Life and Mind—on the Basis of Modern Medicine.* By ROBERT LEWINS, M.D. Edited by "Thalassoplektos." London: Watts & Co. 1880.

HAVING no sympathy with the doctrines laid down in this book—full as it is of irrational dogmatism,—we would fain have set it aside without a word. It may perhaps be worth while just to indicate its tenor, which is that of pure materialism; although both author and editor (who has an appendix of his own exceeding the length of the original essay) lay down the law with so much confidence and self-assertion as to excite antipathy. Including in their onslaught the Christian, and, indeed, all religions, they demolish, no doubt to their own satisfaction, all the cherished beliefs of the majority of mankind. Nor do they spare even such rationalists as Huxley and Maudsley, but assail them for so far submitting to the English dread of ultimate analysis in confessing that there is something beyond our ken that science cannot solve. Assuming the unity of man, and basing their arguments upon cerebration as a function of organised matter, denying any ground for the hope of immortality or the existence of a Supreme Being, denouncing English timidity in refusing to accept the materialistic doctrines so prevalent in modern Germany, they profess to believe that the world will be better, morally, socially, and politically, as soon as their doctrines become universally accepted. And this is said to be the outcome of modern medicine! We do not, and will not, believe it; for we hold, that in restricting himself solely to the material, man unnaturally sets a boundary upon his intelligence, and enslaves himself even more than if he were to blindly accept the narrowest dogmas priestcraft has ever devised. It would be a melancholy thing indeed were such doctrines—which, in spite of the writer's denial, *must* inevitably lead to pessimism and all its evil consequences—to replace that surer trust based upon worthy aspirations after a better life, aspirations that are coeval not with the Christian religion, but with humanity itself.

---

## THE SANITARY CONDITION OF MARGATE.

THE time has arrived when an energetic protest should be entered against the action, or rather the inaction, of the Margate authorities. This town occupies one of the most favoured spots in all England; it is frequented by thousands of visitors and hundreds of invalids, who come from all parts of the country. It has a duty, therefore, not merely to itself, but towards the visitors who enrich its inhabitants. Margate is so directly open to the north that a vessel steering north-half-east would reach no land before she coasts Greenland, in the latitude 75° N. Thus the wind from that direction may travel over 1380 miles of sea. Further, in consequence of the promontory Margate occupies, three winds out of the four pass over the sea before reaching it, and thus the climate is most bracing.

The white chalk soil, and the thin vegetable mould with which it is covered, enable the water to pass rapidly away. The dryness that results is also augmented by the scarcity of rain, for there are neither mountains nor trees to attract the clouds which often obscure the sky, but pass away inland. It is, however, unnecessary to insist further on the climatic advantages of Margate as a health resort; these have been fully vindicated over and over again, but the public at large have a right to protest against the impolicy of authorities who allow the benefits conferred by nature to be marred by the neglect of the most elementary rules of sanitation.

So far back as 1849 the town received a terrible warning. Dr. Chambers and others had in vain urged the necessity of sanitary reform, but it was only when the cholera broke out and killed 124 persons in one quarter, raising the death-rate from 18·5, which was the computed average at that time, to 29·5 per 1000, that some action was taken. A petition to the General Board of Health signed by 303 ratepayers brought Mr. Edward Cresy, C.E., down, who held an inquiry on the subject, and his report to the Board was published in 1850. Mr. Cresy recommended the laying down of sewers, the abolition of cesspools, of private slaughter-houses, and of piggeries within the town, the filling up of private wells, and the creation of a proper water-supply. During the course of thirty years that have elapsed since the cholera had inflicted so severe a lesson, only the latter of these suggestions has been carried out. Margate has a water-supply, though it is questionable if the water be safe from contamination.

In April, 1873, Dr. Gwynne Harries reported to the Medical Department of the Local Government Board on the sanitary condition of the town and the prevalence of certain kinds of disease. The picture given in that account should have sufficed to stir the authorities into action; but the grievances then denounced exist to this day. This damaging report has ominously been kept in the dark. Dr. Chambers, for instance, who has been twice mayor of Margate, had never seen a copy of it; indeed, so rare are the persons who have been privileged to read this report that there are actually rumours afloat of a supposed destruction of the documents.

The first and most prominent defect in the sanitary condition of Margate is what is known as the King-street sewer. This was originally built simply to carry away surface or rain-water. It joins a branch sewer from High-street, and has an outfall to the right of the jetty below low water-mark. A great number of houses, including some of the principal hotels, now drain into this sewer, and must suffer the natural consequences. Dr. Gwynne Harries describes it as of "peculiar, perhaps unique, construction, inasmuch as it rises 15 inches towards the latter part of its course, and thus forms a reservoir in which at least 15 inches of the thickest sewage is always retained. When the tide rises the sea pours down the sewer into this reservoir and drives back the sewage along the remainder of the drain, and sometimes out through the gratings."

Mr. W. Knight Treves, the Medical Officer of Health for Margate, in his report for the year 1875, protests, and has ever continued to protest, against this sewer. He compares it not only to an elongated cesspool, but to a bad cesspool, for it is built of old brick and is pervious. "At spring tides the sea forces back the sewage and causes it to overflow into the basements, and I have seen in this part of the town several of the basements flooded with some tons of liquid sewage." At its outfall the sewage occasions a nuisance at certain periods of the tide. The bathing, which is established on both sides of this sewer, is not so far removed as to be exempt from the probable presence of sewage in the water. At Ramsgate, where there is a similar outfall, the contamination of the bathing is acknowledged, and measures will, we are assured, be taken to prevent the evil.

The greater part of the houses in Margate do not, however, drain into sewers, but possess huge cesspools, which are special institutions in this part of the country, and find many advocates. These cesspools are dug out in the chalk to a depth of thirty, and sometimes even sixty feet. They receive the whole drainage of the house, with the exception of the rain-water, which is often collected in buckets for washing purposes; and, strange to say, the alleged virtue of these cesspools is, the inhabitants maintain, the fact that they readily allow all liquid matter to escape. This preposterous argument we found fully confirmed when we questioned persons in the habit of emptying the cesspools. One person, a plumber, declared that when his men had emptied a cesspool, he always went down in it to see that they had done their work properly. On our inquiring what he considered satisfactory, he replied that he made sure the sides had been "properly chipped." The grease from the kitchen waste and various other substances gradually clog the pores of the chalk, and thus nature ultimately supplies what man should from the first have provided. The cesspool in time becomes water tight. But a water-tight cesspool means the necessity of frequent emptyings, and therefore of constant outlay, and such a result is viewed with no small displeasure by the householder. The plumber consequently plumed himself on his conscientious and disinterested action in rendering these receptacles of every sort of filth as leaky as possible. Not only are the sides "chipped" or scraped, but the bottom is generally dug out a foot or two deeper so that the plugging of the pores here also is removed.

We need not insist on the evils of such a system, they are universally acknowledged. In isolated country houses such cesspools would be bad enough, but in crowded, densely-populated streets they are a dangerous abomination. Yet this is the arrangement at Margate; some of the cesspools have been found even under the houses and the kitchens. In some instances the back yards are so small that the liquid matter escaping from the cesspools must pass under the houses, and the warmer atmosphere within these dwellings must draw the gases generated by this sewage filtration into the inhabited rooms and apartments. Of course, as was amply demonstrated in 1849, the neighbouring wells are contaminated, for the entire subsoil of Margate must be saturated with sewage matter. Ten years were, however, allowed to elapse after the outbreak of cholera before a general water supply was attempted, and even then this was not done by the town, but by a private company, and it was badly done.

A most unsuitable site was selected to sink a well. In a valley known as The Brooks the work was begun, and this on a spot which was probably a Danish burial-ground. In any case a number of human bones were among the first objects dug up. This unpropitious circumstance did not check the work; and when water was found, it was found at a level below that of the sea. Further, when a large quantity of water was extracted, the wells, for some distance round, were dried up, thus proving that the new supply was from the same water stratum as that which had already been condemned. This water has on many occasions been analysed, and though the reports vary considerably, they are, on the whole, decidedly unfavourable; indeed, considering the position of the source, any other result would have been very surprising. There are houses and leaking cesspools sufficiently near to account for anything; the cemetery also, though at some distance, is on a higher level and inland. It is also certain that the water does not invariably move towards the sea, but the rising tide forces it back towards the town well, rendering the supply not merely brackish, but bringing with the salt water some of the sewage of the houses that exist between the well and the sea. This is all the more blameworthy as, close at hand, in the Dane Valley, Professor Attfield indicated the presence of excellent water. Dr. F. Chambers has grouped together four of the reports that have been made in the following manner:—

One gallon contains—

| | No. 1. | No. 2. | No. 3. | No. 4. |
|---|---|---|---|---|
| Total solid matter dried at 212° Fahr. | 69 | 43 | 40 | 55 |
| Free ammonia[1] | much | much | none | none |
| Ammoniacal, organic matter containing 10 per cent. of Nitrogen[1] | 15·0 | 2·0 | 0·0 | 0·0 |
| Albuminoid organic matter containing 10 per cent. of Nitrogen | 2·25 | 1·60 | ·016 | ·161 |
| Nitrites[2] | none | much | none | none |
| Nitrates, containing 17 per cent. of Nitrogen[2] | 8·0 | 6·3 | 5·75 | 3·0 |
| Chlorides, containing 60 per cent. of Chlorine | 24·0 | 11·7 | 10·0 | 27·0 |
| Hardness, reckoned as chalk, grains, or degrees removed on boiling the water | 2·0 | 3·0 | 5·4 | 0·6 |
| Unaffected by ebullition | 6·5 | 4·5 | 4·0 | 4·0 |
| Total hardness | 8·5 | 7·5 | 9·4 | 4·6 |
| Lead, none | 0·0 | 0·0 | 0·0 | 0·0 |

[1] Taken together, No. 1 has a considerable quantity, and No. 2 much.
[2] Taken together, a considerable quantity.
No. 2 is water from the Dane valley. No. 4 is water from the Tivoli well.

Prof. G. W. Wigner, in 1877, analysed two samples of water, and found per gallon:—

| | July 14th. Per gallon. | July 30th. Per gallon. |
|---|---|---|
| Chlorine, calculated as chloride of sodium | 32·76 | 33·70 |
| Nitrogen as ammonia | 0·0025 | 0·0072 |
| Albuminoid ammonia | 0·0060 | 0·0045 |
| Nitrates | 0·8480 | 0·4220 |
| Nitrites | 0·0140 | 0·0080 |
| Total nitrogen in these 4 forms | 0·8705 | 0·4417 |
| Oxygen absorbed by organic matter | 0·0272 | 0·2500 |

In these two samples there was much suspended and vegetable matter. It is evident that the quality of the water varies considerably, according to the more or less intimate connexion between the drinking water and the enormous quantity of liquid filth purposely allowed to escape from hundreds of cesspools. As the town grows in size, and the number of cesspools becomes greater, so will this danger increase: and though the sewage matter undergoes a process of natural purification as it passes through the soil, still it is possible to over-tax this purifying agent, and the best filters, whether artificial or natural, are apt to become fouled.

So obvious are these facts, so pressing and present the danger, and so high is the death-rate at Margate, that the whole question has weighed heavily on the conscience of the town for many years. Lengthy discussions have been held, numerous schemes for draining the town have been drawn up, and finally the proposals of the borough surveyor, Mr. Albert Latham, were accepted, not only at Margate, but by the Local Government Board. Nevertheless years have already elapsed since this high sanction was obtained; but nothing has been done. The fact is that the scheme adopted is a somewhat expensive scheme. A portion of Margate lies so low that it is even below the sea-level, and it is indispensable to establish a pumping apparatus. The most difficult district to deal with is that known as the Marine-terrace. Here the street or esplanade was built after the houses, and these are so low down that they have two basements below the level of the street! Though apparently of but three stories they are really five stories; the drainage of these houses is into cesspools below sea-level, and constantly filled with sea-water. Immediately behind these houses the valley of the Brooks stretches out, and at a point called Tivoli is the well whence the town water-supply is derived. It is difficult to account for the presence of sea-water at Tivoli unless it has first passed by the cesspools in and about Marine-terrace.

The Town Council has just purchased for the great sum of £59,000 the plant and good-will of the Waterworks Company, and as a responsible public body, mindful of the health and life of their constituents, it is to be hoped that they will at once remove their pumping apparatus, &c., either to the Dane Valley or some other spot, where pure water can be obtained. It is equally urgent that the work of laying down sewers and properly draining the town should also be promptly commenced. By the accepted scheme the entire sewage of Margate and Cliftonville would be carried away to the Long-nose—Spit Rock, off the Foreness Point. For this purpose an outfall tunnel some 8000 feet long will be necessary. This will, or should, do away with all cesspools, and with the abominable drains that we have described falling into the sea near the jetty, and with the smaller drains of the Buenos Ayres district, that also fall into the sea objectionably near to the bathing and beach.

In the meanwhile there are smaller but also urgent reforms that could be at once carried out. The presence of piggeries within the town is a most offensive nuisance. A number of private slaughter-houses are badly managed; there is nothing to prevent the filth from them soaking into the soil. The Act, also, with respect to the management of dairies is not carried out, and apparently no one seems inclined to make it his business to enforce the excellent regulations laid down by the law. At the same time, we must give the Sanitary Inspector credit for a display of considerable energy. No less than 113 notices to abate nuisances were served during two weeks in August of this year, and many cesspools are now ventilated.

Nevertheless, considering the climatic advantages that Margate enjoys, the death-rate is high. This is due in some measure to the fact that during the season the inhabitants let the better part of their houses as lodgings, and crowd down in the basements. Here the children are kept in close proximity with the sink, and its untrapped pipe leading to a cesspool, which is perhaps only emptied once in ten years! The infant mortality is consequently excessive. In the year 1878, for instance, the infant mortality at Margate was at the rate of 184 to 1000 births, as against 153 in all England!

The death-rate of Margate is estimated in a manner peculiar to itself. We were presented with what is called a corrected average, but in this the corrections are all on one side. The deaths taking place at the hospitals, at the Infirmary for Scrofulous Disease, and even at the Union workhouse, are deducted. Nor is this all; even the visitors that die at Margate are not included. Nothing, on the other hand, is said of the deaths that occur at the Fever Hospital, which happens to stand within the Ramsgate district, though built for both towns. Apparently the fever cases removed from Margate to this hospital figure in the Ramsgate death-rate. Also it is evident that a great proportion of visitors, on the first symptom of disease contracted at Margate, hasten back to their homes, and thus for the most part augment the London death-rate, when in reality the bad sanitation of Margate is to blame. No allowance is made for this, and it is therefore not fair to compare the so-called corrected death-rate of Margate with that of other towns. Still, even when taken at the best, the figures are not over favourable. Thus, taking the reports of the medical officer of health—reports, by the way, which are only printed when they are considered favourable, and which therefore we had in some instances to read in the manuscript—we find that in 1875 the gross death-rate on the population—11,956—was 23·75 per 1000. The corrected estimate allows for an increase of population only, and amounts to 20·41; the zymotic death-rate being 3 per 1000. Dr. Gwynne Harries in his reports remarks that in 1872 the zymotic death-rate reached 3·8 per 1000, and that seven only of the forty-three English watering-places had a larger proportionate mortality from this cause. In 1876 the gross death-rate was 18·81, but by estimating the population at 13,000, and deducting 30 scrofulous persons who died in the hospital, and 10 visitors, we have a corrected death-rate of 14·23. The zymotic rate was 2·53. In 1877 the gross death-rate is given on a population of 13,500, and not on the census estimate, and it amounts to 18·81; from this 41 deaths in hospitals and 53 among visitors are deducted to produce a corrected average of 11·85. The zymotic rate was only 1·85. In 1878 the gross rate on a population of 14,000 was 21·35; the rate corrected as above was reduced to 17·28. The zymotic rate was 3·5. The average for these four years would be a gross death-rate of 21·18; the corrected death-rate was 15·94, and the zymotic rate 2·72. Nor are these four years exceptional years. They are better than many previous years, though there was a limited outbreak of scarlet fever in 1878.

Considering the bad sanitary condition of the town, these figures are a proof of the counteracting and purifying influence of the climate and winds. Still, for a town so exceptionally placed as Margate, they are anything but satisfactory. Indeed, this would be a good opportunity for interference on the part of the Local Government Board. This body might, at least, insist on the immediate execution of the drainage scheme it sanctioned three years ago, and on the proper supervision of the dairies, &c. The Harbour Company were sentenced in the Court of Queen's Bench to keep the harbour clean, but this is still a great nuisance every time the tide is down, though the decomposed seaweed laid bare would, if removed, make valuable manure. Margate, unfortunately, is a sedentary town, and will not move unless under severe pressure. This town actually fought against railways and against steamers. It would not allow the South-Eastern Railway Company to establish the coaling station here, which has since become the fortune of Whitstable. It resisted the creation of the jetty, which is now the glory of the town. In a word, every form of progress has been energetically resisted by the inhabitants of Margate. Whatever has been done, has been done long after other towns have set the example, and, therefore, it is not surprising if, in sanitary matters also, Margate should be behind the age.

---

THE net proceeds of the Hospital Saturday collection at Lincoln amount to £90 8*s*. 10*d*., £60 5*s*. 10*d*. of which is to be paid to the County Hospital, and £30 3*s*. to the Leeds Eye and Ear Infirmary.

# THE LANCET.

*LONDON: SATURDAY, SEPTEMBER 25, 1880.*


THE nineteen bodies which compete with each other in the business of licensing men to practise medicine within the bounds of Her Majesty's dominions should be more eager than the profession itself for the amendment of the Medical Act. Mr. SIMON in a memorable speech in the Medical Council tried to impress that self-complacent body with the urgency of the question of medical reform by referring to the schism in the profession caused by this question. But to our thinking there is a more powerful appeal still to be made to the nineteen bodies, and that is the schism which exists among themselves. It is true that when the meeting of the Medical Council comes round, the common sense of living in a glass house makes the members all very courteous and considerate towards each other. The love of privilege and existence in them all, and in each of them, secures a sort of common action towards the preservation of each, and of each other. But it remains true that there is a kind of schism in the bodies. They disagree. They misrepresent each other; or, to use the lightest phrase, they misunderstand and distrust each other. This disagreement and mutual disparagement are a scandal incident to, and inseparable from, the present licensing system, and constitute a powerful argument against the system. If we can prove that the scandal exists, and that it is inseparable from the existing system, we shall hope—though it be against hope—to convince those who advocate the system that their great interest lies in a modification of it, and that their interest in such a modification is greater than that of anybody else.

We have, then, to prove the existence of a scandal in the present licensing system, and in the mutual misunderstanding and disparagement which it involves. We shall have no difficulty in doing this out of the mouth of witnesses whose authority will be admitted by both the Medical Council and the various Licensing Bodies in the several divisions of the kingdom. The authority we shall first quote as to the existence of a scandal in the present licensing system is that of a Committee of the Medical Council, representing each Royal College in the three kingdoms, and the Scotch, Irish, and English universities, the chairman of which was Dr. ANDREW WOOD. The language of this committee was as follows:—

"One of the great evils at the present moment is the inequality of the examinations for licence. This inequality of the test of efficiency is the more unfortunate as every licence confers an equality in the right to practise everywhere. The easy examination of one licensing body tends to depress the standard of the examination in all the rest. Visitations of examinations doubtless partly remedy this state of things, but to completely remove it a bolder course is necessary."

The report then goes on to indicate the necessity for such a combination of the Licensing Bodies as may form a Conjoint Examining Board, and to indicate the probability of having to apply to Parliament for powers to effect such a combination. Twelve years have elapsed since this report was drawn up by a Committee of the very greatest weight and authority. The inequality remains, and is a scandal.

But the scandal to which we wish at present more particularly to allude, is the disposition to blame each other evinced by the various bodies and the light in which they have placed each other before Parliament and the public. It is one thing for the bodies to think meanly or disparagingly of each other, and another for them to discredit each other before Parliament, and then quietly to retire from the scene before asking for Parliamentary remedy and securities against the evils which they have described. England blames Scotland and Scotland retorts on England, and both blame Ireland, till statesmen must feel considerable surprise that honourable men should be amongst the defenders of a system under which such charges and insinuations can be made. Let us consider a few of the things that have been said by prominent witnesses before the Select Committee, and which are a part of the indelible evidence before Parliament. Mr. SIMON said the number of cases of gross ignorance passed by the Licensing Boards, and detected by the Army and Navy Boards, were a very serious blot on the system, and showed clearly and decidedly that there was slackness in some of these examinations. Referring to the examination for the degree of Bachelor of Medicine in the University of Edinburgh, to which Professor TURNER justly attaches very great value, Mr. SIMON cooly said:—"I have no reason at all to suppose that it is higher than might properly be the general examination for Scotland." To question 785: Is there any tendency on the part of candidates to run to the easy gates of admission? Mr. SIMON said: "I can hardly suppose the contrary." Sir JAMES PAGET, in his own delicate way, said: "There is a general belief that some of the examinations both in Ireland and Scotland are not so high as they might be. I do not hear it stated that they are so low as to be unsafe; but it is believed that some of them are not so high as they might be." Before he left the Committee Sir JAMES PAGET had to confess that the examination of his own College was most indefensibly defective, and did not include Chemistry, Midwifery, Materia Medica, Pathology, and Jurisprudence. When the Scotch witnesses came before the Committee they were not slow to retaliate. Professor STRUTHERS charged Mr. SIMON with being unacquainted with the existing state of things. Professor GAIRDNER, referring to some hazy and vague language of Dr. ACLAND'S as to the conditions of graduation at Glasgow, described Dr. ACLAND'S state as one of invincible ignorance, or marvellously shutting his eyes to facts; and, referring to the examination for the membership of the English College of Surgeons, said: "England, in this respect, is alone among civilised countries; there is no civilised country in the world except England where it has been quite the habitual thing for a man to go out with a licence in Surgery and not to be examined in Medicine, or Midwifery, or Materia Medica; and there are hundreds of such men in the country now."

Such are a few of the amenities exchanged by the rival witnesses before the Select Committee. Is it creditable that they should be willing to let all things continue as they are, and to take no step to satisfy Parliament and the public that they are doing their very best to remove all the inequalities

and supply all the defects which create mutual distrust, and constitute at the present moment a scandal in the eyes of Parliament? The Bodies themselves—this is our contention—have the greatest possible interest in demanding legislation that shall equalise minimum examinations and suppress that whisper of disparagement which has been heard in Parliament and which will be heard again till the system of Licensing and the Constitution of the Medical Council are altered. The examining system is no longer a parochial or territorial one. The meanest qualification of the lowest body carries Imperial privileges, and should be above suspicion.

---

THE proceedings that have recently taken place at Cork, whereby the treatment of a physician has been impugned, are too serious to be passed over in silence, for they involve matters of much importance to the profession, which in the person of Dr. MACNAUGHTON JONES has been so unwarrantably attacked. They took place, too, at a court of inquiry in which evidence was taken without the protection of an oath; where random and irreconcilable statements were made; where a leading solicitor of the town was opposed, with all the advantage of professional skill, against Dr. JONES, who had to conduct his own case heavily weighted, which he did with commendable vigour, conscious of the right on his side. His position was indeed an unenviable one, but we are proud of the manner in which he managed his case and met the aspersions on his character. It is well known how Dr. MACNAUGHTON JONES has won for himself, by sheer force of energy, a high position in the profession. His name is known not only in the city of Cork, but throughout the United Kingdom; and many will endorse the gratifying testimony of the high estimation in which he is held, given by Dr. DENIS O'CONNOR, the Nestor of the profession in that city, who last year held the honourable office of President of the British Medical Association.

With the evidence before us—and it fills the columns of the local daily journals during a whole week—we are amazed at the character of the inquiry. With scarcely an exception, there has never been so vexatious, so uncalled-for, so cruel a persecution of a public officer as that to which Dr. MACNAUGHTON JONES has been subjected. We would that we could say the case was wholly without parallel; but with regret we recall how, a few months ago, a member of the profession had to defend himself in a court of law in a somewhat similar manner. The occasion which called for the prosecution in that case was substantially the same as in this, although the circumstances were different. In the case at Westminster the same spirit seems to have been at work: the feelings of a bereaved parent (in that case unfortunately a brother practitioner) were aggrieved. Dr. MACNAUGHTON JONES has emerged from this inquiry with his character fully indicated and his course of action justified; but the pity of is that he should have had to endure the anxiety and mental strain entailed by most painful proceedings. We will endeavour to put our readers in possession of the facts of this case, which is full of lessons to the medical profession and to the public.

So far as can be gathered from the mass of evidence—some of it very contradictory—the following is the history of the case that led to this prolonged inquiry, eight months afterwards. In the month of February last, a Mr. CRAWFORD, schoolmaster, had the misfortune to lose two children from scarlet fever. A third child sickened, and the father was strongly urged by Dr. JOHNSON, who saw the case, and diagnosed it as scarlet fever, to send the boy to the Fever Hospital, where a certain number of wards are reserved for paying patients. The staff of this hospital consists of Drs. BEAMISH, JONES, and BUDDS. Mr. CRAWFORD demurred at first, but in yielding he asserts that he stipulated that the child should not come under the care of Dr. JONES, alleging as his reason that he knew Dr. JONES was an enthusiast for experimentation, and "he would not have his child experimented on." It was suggested that the patient should go into the same ward as his sister-in-law, who was under Dr. BUDDS, also for scarlet fever; but to this proposition it would seem Mr. CRAWFORD—who appears to have acted throughout in the most impracticable manner—also objected; and the result was that the child was admitted in the ordinary way, and fell under the care of Dr. JONES, who saw him the morning after his admission, who recognised the gravity of the case—it was one of suppressed malignant scarlet fever—and who prescribed, amongst other remedies, wet packing and the subcutaneous injection of pilocarpin. A few hours later the father, who had heard of the measures proposed, meeting Dr. JONES, requested that another physician, who had no connexion with the hospital, should be called in consultation. This of course was out of the question, and Dr. JONES, not suspecting the real reason of this strange request, told Mr. CRAWFORD so, but offered to hand over the case to, or to consult with, one of his colleagues if the father wished it. But Mr. CRAWFORD expressed himself satisfied. Meanwhile, some difficulty had been experienced in obtaining a solution of pilocarpin of the required strength, and the injection was not administered until Dr. JONES came and gave it himself at the end of the afternoon. The patient was then very ill, and it was evident that the remedy could only be adopted as a *dernier ressort*. The drug produced its usual effects, free diaphoresis, increased bronchial and salivary secretion, &c.; but in spite of stimulants the child died the same night. There are several points which seem to show want of judgment on the part of the resident officer, and bad management generally, but the above are the essential features of the case. There were contradictory statements as to whether Dr. JONES did or did not leave instructions to be sent for if the symptoms grew worse; at any rate he was not sent for, and only knew of the child's death on going to the hospital next morning. The father now alleged—first, that Dr. JONES had not shown care enough; and, second, with strange contradiction, that he had been too energetic in his treatment of the case. He caused an inquiry to be set on foot at the hospital itself, but as the proceedings there were not made public, he entrusted the case to one of the leading solicitors of Cork to formulate specific charges, and at the meeting of the Town Council on September 6th, his solicitor attended to oppose the usual grant to the Fever Hospital on the ground of these charges. After all the facts had been laid before the Town Council, a resolution was carried instructing the managers of the hospital, of which the Mayor is chairman, to hold another inquiry into the matter, and to report to the Council; an amendment by Dr. CREMEN,

expressing confidence in the management and in the inquiry already held, being withdrawn. On September 9th the inquiry was opened; and after public sittings of upwards of five days, during which the whole miserable business was raked up to the full, the committee reported its decision on the 18th. We regret that the inquiry elicited facts which showed that the hospital management was defective in more than one point—to which we shall presently advert.

The charges formulated by Mr. CRAWFORD ran as follows:—1. That having received a distinct promise that his child would not be placed under the care of Dr. JONES, he was subsequently so placed. 2. That Dr. JONES, having refused to allow his (Mr. CRAWFORD'S) private physician to be taken into consultation as to an operation proposed on his child, subsequently performed that operation (a new and dangerous one) without consulting his own colleagues in the hospital. 3. That he performed that operation without any proper explanation to Mr. CRAWFORD of its nature or effect, and without getting his sanction. 4. That he exhibited want of care and discretion as to the time of performing the operation, and great carelessness and neglect subsequently, considering the dangerous and novel nature of the operation.

Upon the first of these charges most contradictory statements were made, and there is only Mr. CRAWFORD'S evidence in support of the allegation. Dr. ADDERLEY, the resident medical officer, who upon some other points was in harmony with Mr. CRAWFORD, gives quite a different version of the supposed request and stipulation, averring that the father demurred to the child being placed under the care of Dr. BUDDS, and yet appeared satisfied when told that it would be admitted in order, and would come under Dr. JONES. The complainant said that at his request Dr. JOHNSON wrote to Dr. BUDDS about the case, but the letter was never sent, because, Dr. JOHNSON says, the child did not come under Dr. BUDDS' care. The charge, however, foolish as it is, gives a clue to the whole of this pursuit of Dr. JONES. From the very first Mr. CRAWFORD distrusted that gentleman, and it may well be imagined that his preconceived opinion dominated throughout, and made him attribute the child's death to its having been under the care of a man whom he mistrusted.

The second charge is the gravest; and the one which carries with it the issues most important to us as a profession and our relations with the public. It consists of at least two points. The first is that Dr. JONES refused to call in consultation upon the line of practice he was about to adopt in the case the "private physician" of Mr. CRAWFORD. This gentleman must have been strangely ignorant of hospital management if he supposed the procedure he suggested could be carried out; but we fear he was encouraged in this request by being told by Dr. ADDERLEY that there was a precedent for him to follow; that Dr. HARVEY had once attended his servant there and prescribed for him, the truth being that Dr. HARVEY only saw the case as any visitor might. It would be absurd and intolerable were this principle of extraneous consultation to be put into practice. A hospital management provides itself with its own staff, and has full confidence in its members, knowing that they are well able to cope with the diseases before them; and the idea of introducing further medical opinion to suit the caprices and whims of the patients' friends is one which has never, we believe, been before broached. It was said that on hearing this request Dr. JONES should have perceived that the child's father had lost confidence in him, but, on the contrary, he expressed himself satisfied, and would not consent to Dr. JONES'S proposal to transfer the case to one of his colleagues! The other count of this charge was that Dr. JONES had performed a "novel and dangerous operation" without consulting his colleagues. That the hypodermic injection of a solution of pilocarpin should be so described is ridiculous. As Dr. JONES clearly showed in his admirable statement, that drug has for some years been used in many diseases, among them scarlet fever. Never were clearer indications given for its use than in the present case; and if once the principle be admitted that the employment of a powerful remedy in a desperate case is to lay the physician open to a charge of malpraxis, all hope of advance in medicine is gone. But we may ask, How was it that Mr. CRAWFORD knew of the intention to employ this drug? what ground had he as a layman to question the procedure, or to allege that it was dangerous? We regret to find it recorded that he obtained this information from Dr. ADDERLEY, who is said not only to have shown him the prescription, but to have intimated that the remedy was a new and untried one, and is further said to have added, that he himself would be afraid to use it. Such an expression of opinion was clearly enough to have disturbed the equanimity of even a stronger man than Mr. CRAWFORD has shown himself to be. Backed up by such a preposterous statement from the resident medical officer, no wonder he felt himself justified in the course he took, magnified the administration of a hypodermic injection into an "operation," and imagined that so grave a step should only be taken after consultation.

Upon the plea that pilocarpin was a new and dangerous remedy, Dr. JONES was, of course, enabled to bring overwhelming evidence in reply. He showed how grave the case was; how such a type of scarlet fever invariably ran a fatal course; how pilocarpin had been advised by some authorities and prescribed by others in like circumstances; and, in a word, how its use was almost the only resource left him to employ. He was supported in his argument upon the nature and uses of pilocarpin by the evidence of Dr. GAVAN DUFFY of Dublin, and by letters from distinguished practitioners. The "prosecution" endeavoured to urge that the drug should have been given by the mouth, and not injected under the skin (or into the veins, as they stated!); that jaborandi should have been given, and not its active principle; but confutation of this special pleading was easy enough. Nor could it be alleged that the injection was not given with the greatest care and caution. Pilocarpin is one of the most powerful drugs of its kind, and most certain in its action; and its employment in such a case as the present was rational and scientific. No time could be lost, and the desperate nature of the case demanded the administration of a rapidly and powerfully acting remedy. What would have been said, it was pertinently remarked, had Dr. JONES contented himself with letting the patient die without trying all the measures known to him? Was he to be blamed because his knowledge was of a wider scope than that of others? The case is another illustration—too common it is to be feared—of

the vulgar ignorance which would rather see the approach of death than sanction the employment of the only means which may avert it, because of a supposed "heroic" character. The father would have felt differently had Dr. JONES succeeded by these means in rescuing the child from death. But are still living in the age of unreason! As to the lack of consultation with his colleagues before giving the drug: it might have been prudent had this course been pursued; but the proposal does not seem to have been entertained at all, for consultations were not the rule at this hospital. Dr. JONES acted on his own responsibility, secure in his knowledge. His action was scientifically right, and there was really no more reason for consultation than there is in the treatment of every patient that comes under the care of a medical man.

The third charge is equally preposterous, and may be dismissed in a very few words. It is not the duty of the physician to explain every step of treatment of a case to the relatives of a patient, and to get their sanction for such treatment. It is enough for them to know that no means will be left untried in averting the fatal result; and to imagine that before such measures could be taken they should be consulted and their approval gained, is too absurd to be dwelt on. So, again, with the final charge, which accuses Dr. JONES of want of proper care and discretion. It was urged that the administration of the drug was postponed till it was too late to have any good effect. Some delay was, it seems, experienced in obtaining the drug, but its administration was left until Dr. JONES himself gave it, eight hours after he had first prescribed it. So again with his other orders,—the "packing" was not commenced until after this second visit, and the child does not appear to have had the stimulant Dr. JONES ordered. There was also a discrepancy as to whether Dr. JONES had left instructions to be sent for if the symptoms grew worse, or not—the result being that, after the pilocarpin was given, he heard no more of the case until the next morning, when he learnt that the child had died in the night.

As may be imagined, the Committee could have no difficulty in arriving at a decision, in spite of the able manner in which Mr. JULIAN, the advocate, conducted his case. They saw clearly that Dr. MACNAUGHTON JONES had acted with full cognisance of the responsibilities of his office, and yet they could not but see that there was something radically wrong in the working of the hospital. This, indeed, came out so plainly at the inquiry that Dr. O'KEEFE sent a letter, which was read in court, maintaining that unless improvements were speedily effected, the Fever Hospital had better be closed. The Committee found that Mr. CRAWFORD had good reason to believe that his child would not be placed under Dr. JONES'S care, but that Dr. JONES was in no way involved in the matter, and that he was quite justified in refusing to take Mr. CRAWFORD'S private physician into consultation. They did not think that the term "dangerous" was applicable to the drug administered in the case. They regretted that Dr. JONES did not take his colleagues into consultation, but the medical evidence showed that from Dr. JONES'S special knowledge of the drug he was warranted in dispensing with the consultation. They did not think it was necessary for Dr. JONES to give an explanation to Mr. CRAWFORD as to his intention to use the drug. Finally, as to the charges of negligence before and after the application of the remedy, want of care as to the time of performing the operation, and lamentable delay in its application, they considered that there was evinced an absence of sufficient care and interest in the treatment of the case. The Committee also expressed their intention of at once attending to the improvement of the management of the hospital.

Thus has ended one of the strangest inquiries that has ever been set on foot. Dr. JONES has been treated with scant courtesy and great injustice, but he has come out of the matter triumphant, and has thoroughly vindicated the rights of hospital medical officers, whose position and responsibilities should surely entitle them to be protected from misrepresentation. Fortunately, this is an uncommon occurrence, for the office of a hospital physician would be intolerable were his practice liable to misconception on any occasion when he is called upon to treat his patients independently. We are sure that the public will, no less than the profession, see that it is impossible for a hospital to do its work unless the fullest confidence is reposed in the medical officers.

---

A CORRESPONDENT, Dr. IRVINE, of Pitlochry, sends us an account of a curious method of treatment of the bite of a rabid dog. A boy was bitten by a dog, and severely lacerated on the face. There were three deep cuts, one requiring a stitch. In order to preserve the boy from the possibility of hydrophobia, the friends had adopted the following precaution:—They wiped all the saliva they could get out of the dog's mouth, rubbed this well into the cuts, and then shot the dog! It is a common belief among the peasantry of the district that this procedure will infallibly prevent the bitten person going mad. Our correspondent rightly points out that the measure constitutes a grave danger to the public, and is, indeed, a public disgrace. We think that the local authorities of the districts in which such a custom is practised should do something to diffuse a knowledge of its extreme danger. If a person were bitten through clothes (so that the saliva were wiped from the biting teeth), and then the saliva of the dog deliberately rubbed into the wound, and death from hydrophobia resulted, the person rubbing the saliva would almost certainly be responsible for the resulting death.

In his Gulstonian lectures Dr. GOWERS pointed out the identity of some of the symptoms of hydrophobia and hystero-epilepsy, that one effect of the poison of rabies seems to be to produce a transient hysteroid state, while, on the other hand, in the paroxysms of hystero-epilepsy there may be barking and biting in a curiously animal manner. This is no doubt the true explanation of a case which came recently under the notice of a police magistrate, and has furnished some of our lay contemporaries with a subject of discussion. A boy had suffered from epileptic attacks for some time, attributed to the bite of a dog two years previously. In these attacks, which recurred every evening, he would bark and bite, and his father was convinced that he was suffering from hydrophobia, notwithstanding the assurance to the contrary of some medical men who had seen the case, and the fact that the dog which had bitten the

boy was still well. From the accounts which appeared in the daily papers the nature of the affection is obvious.

Another case in which the same diagnostic problem arose has been reported from Buckinghamshire. In this, even a medical man appears to have been misled as to the nature of the disease. A boy, whose mother was epileptic and insane, was seized with a peculiar attack. Previously well, he one day "fell off his seat and commenced jumping about the room like a frog. He snapped at everything, even flies, and getting hold of a cap, tore it to shreds. He also barked and acted like a dog gone mad, and it took two men to hold him from the time he was seized with the fit until half past five." A doctor pronounced the case to be one of hydrophobia. The boy was removed to the Maidenhead Infirmary, where nothing could be found to be the matter with him. The lad himself only remembered feeling giddy, and then nothing more till he found himself in the hospital. This was clearly a case of an epileptoid seizure with post-epileptic hysteroid or maniacal symptoms of the character to which DR. GOWERS has called attention.

A case of hydrophobia, in which accidental circumstances rendered the diagnosis at first one of some difficulty, was described to a recent meeting of the Académie de Médecine, by M. HARDY. On August 18th he was asked, at the house of a patient whom he was visiting, to see also the coachman, who had had some painful symptoms since an attempt to move a heavy carriage a few days before. Feeling great pain in the arm immediately afterwards he had it tightly bandaged. In consequence of the compression the hand and forearm swelled and became livid and very painful. During the next two nights a new symptom came on, a sense of constriction in the chest and throat, occasional hiccough, and an inability to drink. At the same time the patient was restless and could not sleep. M. HARDY found him with a normal pulse, but with sunken eyes and anxious countenance. On being offered water in a glass or spoon the man threw back his head, closed his teeth, and was seized with spasm in the throat. It was ascertained that four months previously he had been bitten on the finger of the left hand by a small dog which was constantly with him, which slept in his bedroom, and was usually very quiet. On that day, however, it suddenly became troublesome, bit its master, and then ran away, and had not since been heard of. Two months and a half later, another dog in the house became ill, and a veterinary surgeon, to whom it was taken, pronounced it rabid, and poisoned it. It could scarcely be doubted, on these facts, that the coachman was suffering from rabies. Chloral was given by the rectum, an injection of morphia was administered by the skin, and the constant current applied to the throat. Under the latter the spasm ceased at once, and for some hours the man was able to drink. Forty-eight hours after the onset, however, convulsions came on; he endeavoured to get up and go away. Seven or eight assistants could scarcely keep him from jumping out of window. After several similar attacks he became weaker, and died on the third day. M. HARDY raised the question whether the pain suffered in consequence of the injury to the arm may not have acted as the excitant of the symptoms, and also remarked that the period of incubation in the man was, in this case, nearly double that in the dog; and, lastly, pointed out the lesson, taught by so many cases of the disease, that suspicious symptoms in familiar dogs should be met by the same precautions as would be adopted in the case of strange animals. M. BOULEY also insisted on the importance of the diffusion of a knowledge of the early symptoms of rabies. In the case under discussion, in a household in good position, characteristic symptoms had been quite unnoticed. He mentioned a curious instance of the manner in which such things were managed better out of France than in it. When on a visit to Bavaria, to one of the councillors of the district, in 1866 or 1867, he found himself one day an object of great interest to a troop of children coming out of school, and he ascertained that at this school the children had been made to learn by heart a report on the early symptoms of rabies which he had presented to the Académie in 1862. The example might be followed with advantage elsewhere, and it seems probable that it will now be followed in France. M. BOULEY mentioned another instance of the value of the constant current in the paroxysms of spasm. A young veterinary surgeon in La Capelle, suffering from rabies in consequence of the bite of a dog, and violently convulsed, was treated by a constant current from the nape of the neck to the soles of the feet, and immediately all the phenomena of dysphagia ceased, and the patient recovered the power of drinking.

Another case of hydrophobia, which has lately occurred in Paris, was also that of a veterinary surgeon. He had been bitten at least twice previously by rabid dogs, but on each occasion the bite was in soft parts, where it could be immediately and efficiently cauterised. The last bite, which caused his death, was near a finger-joint, where there was no adipose tissue beneath the skin; and the cauterisation, first with nitrate of silver and then with nitric acid, was probably insufficient—at least this was the opinion of the unfortunate subject of the disease. The period of incubation in this case was three months.

These are the only two cases of hydrophobia which have occurred in the Department of the Seine since the commencement of the present year, although twenty-four persons are known to have been bitten by rabid dogs, and no less than 127 dogs have been killed as distinctly rabid or as presenting suspicious symptoms, and 103 dogs destroyed in consequence of their having been bitten by rabid animals.

# Annotations.

"Ne quid nimis."

## GUY'S HOSPITAL.

THE state of civil war at this hospital continues. At the meeting of St. Saviour's Board of Guardians on September 17th Dr. Iliff drew attention to the subject, upon a letter from Dr. Rendle, of Forest Hill, urging the Board to intervene between the Governors and the medical staff; and an extract from a letter written by one of the staff was enclosed, stating that the medical staff and the governing body were "more at loggerheads than ever." Dr. Iliff referred to the changes that had taken place in the nursing arrangements, and defended the old nurses from the aspersions cast on them; and after referring to the case of Ingle, which, he imagined, would have led to some alteration in the

arrangements, he moved that a memorial should be sent to the Governors, setting forth that the Guardians had heard with regret the differences between the Governors and the medical staff on the nursing question, and of the determination of the former to make the latter subordinate to the nurses, which could but result in great injury to the patients. They had also heard with regret the attacks made upon the old nurses, but were not without hope that the Governors would yet see their way clear to modify the present system, so that all concerned might work more harmoniously. The chairman, in seconding the resolution, said the memorial would call the attention of the Governors to the fact that they were subject to the opinion of the public. Mr. Robins was of opinion that the memorial did not go far enough, and intended to move at the vestry for a petition praying for an inquiry into the whole system. Mr. Williams would have liked the memorial to be more severe. It was unanimously agreed that the memorial should receive the seal of the Board and be forwarded to the Governors. We are glad to see this awakening of the public mind to the continuance of this scandalous state of affairs; and we are at a loss to conceive how the governing body can persist in their line of action in the face of an opposition which is by no means limited to their own medical staff. A letter from Sir Thomas Dyke Acland appears in our issue to-day on the present position of the nursing question at Guy's and elsewhere.

## EXPERIMENTAL DIVISION OF THE OPTIC AND CILIARY NERVES.

THE effect of division of these nerves, separately and together, has been studied experimentally by M. P. Redard, on rabbits and dogs. The ciliary nerves were divided alone, chiefly upon dogs. The nerves are distinctly sensitive. After complete division the cornea had lost all its sensibility, and its transparency quickly disappeared. The pupil dilated. In rabbits the dilatation of the pupil was preceded by a transient contraction. If the section of the nerves is partial, the anæsthesia and paralysis of the iris are also partial. The pupil becomes irregular. When the outer ciliary nerves are alone divided, the outer part of the iris is alone paralysed, and the inner part still contracts under the influence of light. The division of the nerves did not, in these experiments, lead to any disturbance in the nutrition of the cornea or of the eyeball, unless the injury and hæmorrhage produced by the operation were very great. The dilatation of the pupil continued for four or five months, but the sensibility of the cornea returned in about three months, at first locally, afterwards generally. Several animals were exhibited to the Société de Biologie in which the ciliary nerves had been divided a year and a half before, and the sensibility of the cornea was perfect. The circulation in the optic papilla was disturbed soon after the operation. Sight was impaired at the commencement, but complete blindness was never observed. In some there appeared to be no disturbance of sight. In a few cases there was distinct optic neuritis, with partial consecutive atrophy, irregularity of the edges of the papilla, and dilatation of the veins.

If both the optic and the ciliary nerves are divided there results, of course, immediate insensibility of the cornea, and enormous dilatation of the pupil. The fundus oculi and papilla are pale, but some veins remain gorged with blood. Trophic changes often lead to failure of the operation; the cornea becomes perforated, and the eyeball undergoes atrophy. This happened with especial frequency when the blood effused in the wound hindered union of the divided structures, or when the upper part of the eyeball had been laid bare in the neighbourhood of the insertion of the superior rectus. This effect was attributed to the division of the anterior ciliary vessels. In the majority of cases, however, the nutrition of the cornea, and the shape of the eyeball, were not affected. Black hæmorrhagic points were seen near the disc, and some patches of choroidal atrophy. The pupil remained dilated, and only at the end of about six months did it recover, in slight degree, its contractility. Corneal sensibility returned in three or four months. In the animals shown, which had been operated on a year and a half previously, it was almost perfect. The ciliary nerves appeared to have undergone almost complete regeneration.

## THE PROVIDENT DISPENSARY MOVEMENT IN MANCHESTER.

THE most important development of the Provident Dispensary Movement of late years has been the attempt to establish them on a large scale systematically in Manchester, Liverpool, Birmingham, &c. The *Manchester Guardian* contains a report of a meeting of working-men in the dining-room at the Ashbury Carriage Company's works in connexion with the new branch of the Manchester and Salford Provident Dispensaries Association. Dr. John Watts delivered an address, in the course of which he said there were now four Provident Dispensaries in the city that were paying their expenses entirely, and wanted no contributions except from members. Two others were just upon the edge of self-support, and a seventh was making very fair progress, but it was not yet a year old. The Council wished to establish an eighth in that neighbourhood. As regards the mortality of Manchester, Dr. Watts stated that the death-rate in the city had decreased in forty years from 44 per 1000 to 24 or 25 per 1000. He thought by the progress of the work of Board Schools and of Provident Dispensaries the mortality would go down still further. It is very gratifying to read such reports. We can only criticise them with a view to the production of still better ones. We should be glad to hear how much the dispensaries pay their medical men,—that is to say, the proportion between the work that has to be done by the medical officers and the remuneration they receive for doing it. Secondly, we shall not be considered ungracious in reminding the sanitary authorities that in the week ending Sept. 4th the mortality of Salford was at the rate of 35·1 per 1000, and that it shared with Leicester in that week the discredit of the highest mortality in England from the seven principal zymotic diseases. The extension of Provident Dispensaries would tend greatly to the reduction of this mortality, as would also the more extensive establishment of *crèches*, where infantile life might be considered and cared for in the unavoidable absence of the mother. We may direct attention to a letter signed "L.R.C.P.Ed." printed in another column, in which the writer defends the system of provident dispensaries.

## THE MEDICAL SCHOOL AT SHEFFIELD.

AN anonymous writer, signing himself "Investigator," in a letter to the *Sheffield Daily Telegraph*, discusses the expediency of procuring a new site for the medical school at Sheffield. He strongly opposes the proposal, on the ground that any want of success in the medical school in this town arises not from any fault in the building, but from other causes. Amongst them he assigns a principal place to the fact that the teachers are too much occupied in the arduous work of practice to be able to give proper attention to teaching duties. He adduces the "comparatively small population of Sheffield," "the exceptionally small fees customary there," and entailing large and laborious practices, as reasons for doubting the desirability of perpetuating the Medical School. This writer may be correct, but some of his arguments are weak. The population of Edinburgh, with a medical school in the university only of 1200 students,

is less than that of Sheffield—196,979 against 239,346. Newcastle-on-Tyne, with a fair provincial school, has only 128,443. The population of Leeds only exceeds that of Sheffield by about ten thousand. There is population enough for the purpose of a good medical school. Whether there is anything in medical practice different from that which obtains in other similar towns is a different and an interesting question, in which the profession in Sheffield must be the best judges; but we should be sorry to think that the conditions of medical life amid nearly a quarter of a million of people are so hard and commercial as to leave no time for the work of medical education.

## THE ACTION OF THE HEART.

THE differences in the action of the right and left ventricles of the heart have been studied by MM. Chauveau and Marey. The form of the intra-cardiac pressure is, they find, not the same in the two ventricles. The maximum of effort of the right ventricle is attained from the commencement of the systole, while in the left ventricle the pressure goes on increasing up to the end of the systolic period. The pulsation of the heart which reveals the changes in the consistence of the ventricles, varies with the variations in the pressure exerted on the blood in the interior. Accordingly different traces are obtained from the right and left side of the heart. M. Marey has endeavoured to ascertain a criterion to indicate which ventricle is furnishing a given tracing. He finds that the two sides of the heart do not behave in the same manner during an arrest of respiration. The stasis in the right side, due to the impeded pulmonary circulation, soon changes the character of the corresponding pulsation. It loses its amplitude and it becomes several times more feeble. The lessened amplitude is due to the elevation of the base line, the summits always presenting the same horizontal line. The tracings from the left side of the heart show, on the other hand, an increase of amplitude instead of a diminution. Another distinctive sign depends on the intimate connexion between the blood pressure in the left side of the heart and in the aorta. If an influence lowers the aortic arterial tension (as by nitrite of amyl) so as to cause conspicuous waves in the aorta, similar waves occur in the trace obtained from the left ventricle, as a bifurcation or trifurcation of the summit. The tracing from the right ventricle, however, only presents indications of those waves which arise by propagation.

## SANITATION AT OBER-AMMERGAU.

THE passion plays at Ober-Ammergau have this year been successful beyond all hope. The number of visitors was so considerable that many deemed themselves fortunate in obtaining sleeping accommodation in haylofts. The receipts made by the villagers who take in lodgers and by the performers must have swollen the budget of the local authorities to gigantic proportions. Under such circumstances we may, in the name of the visitors whose presence has enriched this village beyond all parallel, protest that some small proportion of this wealth might be devoted to observance of the laws of health and of decency, which at present are but too often totally disregarded. A square box placed in the centre of an ordinary room, containing a leaky pail, even though ornamented by the rough wood-carving of an Ober-Ammergau artist, is not our ideal of commodious house-drainage. The pools of escaped liquid matter formed on the floor and saturating the basement of the houses are neither pleasant nor safe. The inhabitants also manifest a distinct disinclination to empty these obnoxious buckets, and when finally they are compelled to do so, the pail is rarely conveyed more than a few yards from the door of the house, so that the outer air as well as the inner air is more or less poisoned by this reckless and disorderly disposal of sewage. The passion plays originated in an outbreak of what was called plague, though it was probably typhus fever. The malady was imported by a peasant who came to visit some relations, and it resulted in the death of eighty persons. This caused so great a panic that the superstitious inhabitants determined to institute a passion play, which was to be repeated every ten years if the plague ceased. As this took some trouble to organise, the plague had time to wear itself out before the performances were completed, and they have consequently been repeated every ten years. If, however, some sanitary measures are not adopted for the reception of the thousands of tourists who now flock from all parts of the world, and crowd together in this little village, epidemic disease will probably make its reappearance. The villagers have made their fortunes out of the first advent of the plague, but they should be careful, or a second epidemic may rob them of these advantages. The theatre, we are informed, is always full and it holds six thousand persons. The price of the places varies from one to twelve shillings; the working expenses are very small, and there are two performances per week. Surely the margin of profits will admit of some little expenditure in defence of public health, and in the cause of cleanliness, which is next to the godliness the pious villagers so loudly profess.

## THE PHYSIOLOGY OF WALKING.

M. MAREY has applied the graphic method to the investigation of some points in the physiology of walking. Some time ago he devised an apparatus for registering the steps, which he has called an "odograph." It consists of a small cylinder, rotating by means of clockwork in its interior; and of a pen, which marks on the cylinder, and is raised at each step by an impulse communicated by a ball of air beneath the sole. Observations have been made on a number of young soldiers. It was ascertained that the step is longer in going up-hill than in going down-hill. It is shorter when a burden is carried; longer with low- than with high-heeled boots; longer when the sole is thick and prolonged a little beyond the foot, than when it is short and flexible. It thus appears that the heel may, with benefit, be almost indefinitely lowered, while it is disadvantageous to prolong the sole of the boot beyond a certain limit, or to give it an absolute rigidity. Some influences which lengthen the step lessen its frequency; so in going up-hill the step becomes at the same time longer and less frequent. In walking on level ground the length of the step and its frequency are always proportioned; the quicker the walk, the longer the step. M. Marey is inclined to believe that when the steps are lengthened by a change in the boot, the recurrence is rendered more frequent.

## HOSPITAL DIETARIES.

AT the half-yearly meeting of the subscribers to the Bristol General Hospital, the chairman, Mr. Naish, submitted the usual report, in the course of which he stated that the medical staff were rather extravagant in their dietary arrangements. They ordered a great deal of fish and fowl, with consequent great increase in the expenditure. The Rev. Canon Girdlestone, in moving a vote of thanks to the chairman, whose devotion to the institution he warmly eulogised, ventured to differ from him upon the above point, and quoted from his experience of the poor that the change from their scanty living to the generous diet of the hospital materially aided in their recovery; and he would therefore leave the question of diet to the medical staff; in which the chairman concurred. No doubt it is in matters such as these that hospital expenditure is much increased; but we are pleased to see that there was no intention to tie the hands of

the medical staff, or to dictate to them as to the manner in which the patients should be dieted. This is a matter in which they only can judge, and they must consider the welfare of their patients before the question of hospital finance. Parsimony in this direction is, after all, the worst paying policy.

## CADAVERIC ALKALOIDS.

THE properties of the alkaline compounds which are formed during the decomposition of animal tissues have been the subject of an investigation by MM. Brouardel and Boutmy, which has been communicated to the French Association for the Advancement of Science. Such substances have been called *ptomaines*, and they have been found in the bodies of individuals who have died a natural death, and also in those who have been poisoned. In cases in which the tissues are to be subjected to chemical analysis, it is important to prevent the formation of these alkaloids, and the most efficient agent for this purpose is cold, and hence M. Brouardel has arranged for bodies which are to be subjected to analysis to be kept in the Morgue in chambers of refrigerated air. The "ptomaines" come into the general class of organic alkaloids, and many of them are most energetic poisons, others being quite innocuous. Although there are many distinct substances in the class, identical bodies are formed under very different conditions of putrefaction. The same alkaloid, for instance, was found in two individuals who were poisoned, the one by carbonic oxide, the other by prussic acid. A few are fixed, but the majority are volatile. A substance closely analogous to veratrine was found in a body which had been eighteen months in the Seine, and another in a goose which had been subjected to the heat necessary for cooking. Certain of these substances are clearly poisonous to man, and apparently cause the toxic effects which occasionally result from eating decomposing meat. Symptoms of serious poisoning occurred, for instance, in twelve persons who had partaken of a putrid goose which had contained a peculiar alkaloid, and one of these persons died in a few hours after nausea and vomiting. These poisonous substances may be quickly formed, for in this case the goose had been purchased in the market in the morning of the day on which it was eaten.

## THE SANITARY CONGRESS.

THE annual autumnal Congress of the Sanitary Institute commenced its sittings, under the Presidency of Earl Fortescue, in Exeter on Tuesday, the former part of which day was devoted to the usual procession, festivity, and mutual congratulations. On Wednesday, Professor de Chaumont presided over the section of Sanitary Science and Preventive Medicine, and delivered an interesting address. Mr. H. C. Burdett then read a paper on the "Unhealthiness of Public Institutions," which excited a long and animated discussion, many leading sanitarians taking part in it.

## THE SENSE OF COLOURS.

M. CHARPENTIER of Nancy has propounded to the French Association for the Advancement of Science the somewhat novel theory that the sense of light and that of colours is independent. White light being the sum of the various colours, it has been commonly thought that the sensation of white light was simply the sum total of the sensations of its constituent colours. On the ground that the sensitiveness of the eye for white light may be increased—as, for instance, by the previous absence of all light—without the sensitiveness for colour being increased, he urges that there is a colour-sense as distinct from that of light as is the sense of touch from the sense of heat.

## THE VAUXHALL RAILWAY ACCIDENT.

ON Friday last Watson, the driver of the stationary engine in the recent accident at Vauxhall, was seriously ill with new symptoms, accompanied by a high temperature (104° to 105°). Mr. Sydney Jones then saw him in consultation with Dr. Crossman. It was decided to trephine Watson for a punctured wound of skull; a piece of the outer table of the right parietal bone had been driven in, splintering and depressing the inner table. The man has since been improving. On Saturday, the day after the trephining, his temperature had fallen to 101°; on Monday to 99·6°.

## ICHTHYOSIS.

MARKED changes in the nerve-roots in congenital ichthyosis have been found by M. Leloir. The cutaneous nerves presented changes such as have been before described. In the nerve-roots, moreover, at their origin from the spinal cord, a considerable number of nerve-fibres, of both the anterior and the posterior roots, were degenerated; presenting the lesions of "atrophic neuritis," empty sheaths with nuclei here and there, the myolin and axis cylinder having completely disappeared. A few nerve-tubules presented more recent lesions. The spinal ganglia were not examined.

THE death is announced of Mr. W. B. Whitmarsh, Coroner for Wilts. Mr. Whitmarsh, at the time of his decease, was the oldest coroner, both as to age and office, in England, he having held the post for fifty-three years. The county coronership had descended from father to son for more than three hundred years, all, with the exception of its latest holder, having, we believe, belonged to the medical profession. Dr. Michael Whitmarsh, son of the deceased, will, it is understood, solicit the suffrages of the freeholders for the post.

MR. R. BASIL CANE, Local Government Board inspector, has been conferring with the West Derby Guardians on the subject of boarding-out of pauper children. Whilst generally approving of the system, Mr. Cane submitted a few suggestions for its improvement, and amongst other pieces of useful advice, pointed out the necessity of the children undergoing a medical examination before being dismissed from the workhouse.

DR. AUSTIN FLINT, JUN., has been invited to the Chair of Physiology in the Jefferson Medical College, Philadelphia, but has declined, preferring to remain at Bellevue Hospital Medical College, New York. We congratulate Bellevue on this decision of Dr. Flint, who must be regarded as not only one of the most advanced teachers in the States, but one of the best friends of higher medical education.

THE work of Dr. W. W. Ireland, of the Scottish National Institution at Larbert, on Idiocy and Imbecility has recently been translated into the Russian language by Dr. Tomaschewski, with a preface by Professor Mierzejewski; at the same time the Medico-Psychological Society of St. Petersburg (Société des Psychiatres) has conferred on Dr. Ireland the diploma of Corresponding Member of their body.

THE Melbourne Hospital Committee (says the *Australian Medical Journal*) has determined to pay the whole of Dr. Stirling's expenses in the recent action of Dean *v.* Stirling, notwithstanding the recommendation of a sub-committee that one-half only should be paid.

WE regret to report the death, from heat apoplexy on August 13th, at Sibi, *en route* to Kandahar, of Surgeon-Major John Simpson, in medical charge of the 23rd Bombay Native Infantry. Dr. Simpson was in his thirty-ninth year.

ABOUT £88,000 has now been subscribed towards the cost of the projected University College of Liverpool. Amongst the endowments is a sum of £10,000, given by the trustees of the late Mr. Roger Lyon Jones to the Royal Infirmary School of Medicine, to found a chair of Experimental Physics, with which Mathematics will for a time be associated.

THE Committee of the Manchester Free Library have resolved to place at the disposal of the Guardians books which have been withdrawn from circulation as worn out or imperfect, and also a number of newspapers, for the use of the inmates of the workhouse hospital. This is a work of practical benevolence which we have long advocated.

WE regret to notice the death of another army medical officer in the terrible catastrophe at Naini Tal. Surgeon-Major J. B. Hannah, M.D., is reported in the meagre telegram from India to be among the killed. Further particulars of this untoward occurrence will be anxiously looked for.

IN the late sortie from Kandahar against Ayoob Khan's forces Dr. Trafford was wounded, but is reported to be doing well.

DR. T. SPENCER COBBOLD, F.R.S., has been elected Foreign Corresponding Member of the Turin Royal Academy of Agriculture.

# Public Health and Poor Law.

## LOCAL GOVERNMENT DEPARTMENT.

### REPORTS OF MEDICAL OFFICERS OF HEALTH.

*Huddersfield* (estimated population 80,245).—Dr. Spottiswoode Cameron's report for the year 1879 has a special interest from the information it contains, particularly during a considerable prevalence of scarlet fever, respecting the operation of the compulsory clauses regarding the notification of infectious diseases contained in the Local Improvement Act for the borough. He tells us that this clause "has been more carefully attended to than formerly," but that there is, in this respect, still much to be desired. 244 cases of infectious disease were, it appears, reported to the corporation under the clause. Of these cases 175 were removed to the corporation's fever hospital, of whom 12 died; and 69 were isolated at home, of whom 16 died. In addition to information of cases received under the compulsory clause, the corporation obtained information from other sources of 217 cases of infectious diseases, including 43 first ascertained from the death returns. Three of these cases were removed to hospital, of whom 2 died; and 101 were isolated at home, "or were supposed to be," of whom 27 died. It would thus appear that of 461 cases, little more than half were brought to the knowledge of the sanitary authority by the operation of the compulsory notification clause. Obviously there is much friction (passive if not active) still to be overcome in Huddersfield before the population can reap the full benefit of the clause.

"There are two difficulties," Dr. Cameron observes, "in the working of our present clause. One is the 'sufficient accommodation' proviso. Should the new Act become law information will be required in every case of certain infectious diseases, and the shifting of the responsibility of determining what is sufficient accommodation from the medical attendant to us will place him in a less embarrassing position with the friends of the patient. The other difficulty is one of diagnosis. It is often quite impossible to say whether a particular disease really exists or not. Scarlet fever not unfrequently presents itself without a rash, with no noteworthy fever, and without any very marked indication of sore throat. Such cases are apt to be overlooked; it is such cases often that spread the disease to a whole family, and, unfortunately, parents have too frequently the notion that these cases are not infectious, or that infectiousness ceases when the children can run about. Several instances of this kind have come under our notice during the past year, and in many of them there seems every reason to believe that the parents, and sometimes even the doctor, have been in doubt as to the real nature of the malady. Such cases, too, present a grave difficulty to your medical officer, for if brought under his notice it is a serious responsibility to remove such doubtful cases to hospital; while, if not removed, they may cause grave mischief in their neighbourhood. We have had very little opposition to contend with in carrying out the clause. As has been already hinted, our difficulty at one time was rather to find accommodation for the patients."

The hospital accommodation at the command of the corporation was inadequate for the number of cases which might have been isolated, alike to the advantage of the community and the patient. The actual accommodation afforded by the hospital is not stated, but there were 22 patients in it on the 1st January, 1879, and 200 cases were treated in it in the course of the year. Of these cases 175 were cases of scarlet fever, 17 of enteric fever, 1 of diphtheria, 4 of measles, and 3 of a doubtful nature. The hospital accommodation is being increased by the erection of a new pavilion, stated to be, at the time of completion of this report, "far advanced towards completion."

*South Shields* (estimated population 62,000). — Mr. John Spears reports for the year 1879 a birth-rate of 35·8 per 1000 population, and a death-rate of 19·6—"the lowest death-rate for South Shields on record." The most noteworthy facts recorded in the report related to an epidemic of scarlet fever which had been prevalent in the borough for two years, but which in 1879 began to give indications of decline. The measures which it had been practicable to put in operation with a view of preventing this epidemic proved to be inadequate from the absence of proper hospital accommodation for the isolation of sufferers, and of the necessary statutory provisions for the enforcement of such isolation at their own houses. Four hundred cases of the disease were brought to the knowledge of the medical officer of health, and in each case disinfectants were distributed free of cost, and disinfection made use of under the supervision of the medical officer of health or the inspector of nuisances. At the time of the first outbreak of the disease, the influence of public day-schools in the dissemination of the infection was very apparent; and the same fact was made further so as the disease extended. On different occasions children were found attending school from infected houses, and local outbreaks of the disease were clearly traceable to conveyance of the infection in this manner. The extension of the disease, moreover, was observed in tenemented houses by its spread, in several instances, from the families on the lower floor to the families on the higher floors. The congregation of neighbours in fever-stricken houses for purposes of sympathy and gossip proved also to be a fertile source of mischief. "To deal effectually with such an outbreak as that from which we have suffered and are suffering," Mr. Spears observes, "suitable hospital accommodation for the removal of the afflicted from tenemented houses is required, and also a system of compulsory registration of infectious diseases, with increased statutory powers to prevent the exposure of reckless and ignorant persons, themselves and their children, to the dangers of infection."

Mr. Spears relates the following instances of recurrences of zymotic disease in a particular house, occupied by two tenants. In this house, within twenty months, there had been three separate outbreaks of diphtheria, all fatal; one of scarlet fever; and two of erysipelas. An examination of the house had been made, but no sanitary defects discovered. On a further examination, however, being instituted, it was found that the rain-spouts from the roof at the front of the building ran through the house, quite out of sight, to a rain-water tank in the back yard. This tank had an overflow-pipe communicating directly with the sewer; and it was found by experiment with sulphuretted hydrogen gas that sewer-air could, from the escape-pipe of the tank, reach every room in the house.

Five cases of typhus occurred in the borough during the year, all caused by infection introduced from Jarrow, where the disease had prevailed.

*Whitechapel*.—Mr. John Liddle's report for the second quarter of the present year (ending July 3rd) shows a mor-

tality at the unusually low annual rate of 19·8 per 1000 population of the district. The number of deaths during the last quarter was less than had occurred in any other quarter since the establishment of the local Board of Works. An effort made by Mr. Liddle and his board to induce the Metropolitan Board of Works to adopt, under the Artisans and Labourers' Dwellings Act, 1875, an improvement scheme in part of the Whitechapel district failed, the Metropolitan Board holding that the unhealthy area, to wit, 8650 square yards (or nearly two acres), and containing a population of about 1050 people, was too small to admit of a comprehensive improvement scheme being designed. The reason assigned for not dealing with the area seems curious in view of the public-health aspects of the question. Mr. Liddle expresses his regret that attempts should have been made to alter the existing Vaccination Acts, so far as repeated prosecutions of persons who refuse to have their children vaccinated are concerned. He believes that such alteration would have seriously interfered with the successful way in which the Acts are now being worked within his district, and he deprecates meddling with them.

It is pleasant to read that a disused Quakers' burial-ground in Whitechapel has been converted into a public recreation ground. The ground contains 5445 square yards, or about 1¼th acre, and it has been laid out by Mr. Irons and ornamented with shrubs and flowers. It was opened for public use by the Prince and Princess of Wales on June 24th, and it now forms, Mr. Liddle says, "an enjoyable playground, where children can amuse themselves in safety, and where adults may find temporary rest and repose away from the confined and crowded courts in which so many of the poorer inhabitants of this district reside." Mr. Liddle tells us that there are still two other open spaces in Whitechapel—both disused burial-grounds—which may be made available for public recreation-grounds, and we heartily sympathise with his hope that they may shortly be converted to this use.

## THE DISTRESS ON THE WEST COAST OF IRELAND.

One of the most interesting official papers which have been issued with respect to the distress in Ireland is a report by Captain Geo. Digby Morant, R.N., on the operations of the several vessels of the Royal Navy, six in number, which, under the command of H.R.H. the Duke of Edinburgh, were directed to aid in the distribution of relief to the distressed populations on the West Coast of Ireland and on the islands there. The service of these vessels, forming what is known as the "Relief Squadron," began early in the year, and continued to the 1st of August; and during this period they carried large amounts of food and clothing from the Mansion House and Duchess of Marlborough's committees to places which would else have been inaccessible, or with difficulty accessible, and so obviated, in all probability, much fatal starvation. The communities relieved are estimated approximately to number 36,841 persons, and the relief issued consisted of 856½ tons of meal, 453 tons of seed potatoes, 30 tons of oats and barley, and 110 bales of clothing, besides a considerable quantity of loose clothing. The report throws a good deal of light upon the present condition of the populations relieved. The distress did not come suddenly upon them on account of the failure of last year's harvest. For several years the people have been getting poorer and poorer, when all credit having been stopped by the shopkeepers, and the potatoes saved from the previous harvest eaten, the crisis was determined, and the people reduced to the verge of starvation. Kelp-burning, which not long ago formed the principal source of livelihood of the people, has seriously fallen off in value of late years. In Tory island, for example, where not long ago the burnt kelp sold for £7 a ton, the material only realised £2 a ton last summer. Again, in Connemara, in the Kilkieran district, up to four or five years ago a sum of £15,000 a year was paid for kelp, but during the last two or three years the district has received only £2000 or £3000 a year. While the times were prosperous the population appears to have multiplied largely, the early age at which marriage takes place—namely, nineteen and twenty years—contributing greatly to this increase. The kelp industry having failed, the people had to fall back chiefly upon tilling the ground and fishing. But the crops capable of being grown are utterly insufficient to support the populations, and, moreover, the holdings are very small; while the means for fishing are, as a rule, too imperfect to help much in the sustenance of the communities. It is the old distressful story of a people too thick upon a ground where there is no dependable industry for support—where the land itself, partly from the nature of the climate, partly from the smallness of the holdings, cannot support them as they ought to be supported, and where there is not the means of developing new sources of profitable industry. Life is, as a rule, only maintained on the cheapest and most accessible food, at the best in barely sufficient quantity; and a succession of imperfect crops, or a failure of the principal crops, at once plunges the mass of the population into an extremity of destitution.

## THE METROPOLITAN WATER-SUPPLY.

The Metropolitan Asylums Board, at their meeting on the 18th inst., had under consideration the occasional failure of the water-supply, derived from the Southwark and Vauxhall Company, of the Stockwell Fever Asylum. Notwithstanding the intervention of the Local Government Board, who directed an inquiry into the matter, the explanation given by the Company appears to have been most unsatisfactory. The serious consequences apt to arise from a great hospital being deprived, even for a very brief time, of its water-supply, at once arrests the attention. But proportionately the evil is no greater than when a like fate befalls a private dwelling, whether by accident or by the cutting off the supply by the Company. Accidental failures cannot at all times be guarded against, but there needs to be some control, in the sanitary interests of the public, over the power which the water companies now hold of depriving houses of their water-supply. In the impending revision of the powers, if not entire change in the position, of these companies, regard should be given to this absolute control over the supply, so that it be not exercised to the prejudice of the public health.

## THE METROPOLITAN INFECTIOUS-DISEASE REMOVAL MUDDLE.

At the meeting of the Metropolitan Asylums Board just referred to an interesting illustration of the confusion existing in London regarding the removal of cases of infectious diseases to hospital for purposes of isolation was afforded. A patient suffering from scarlet fever had been sent from University College Hospital to one of the Asylums Board hospitals without regard to the required forms. If a pauper, the patient should have been sent through the agency of the relieving officer; if a non-pauper, through the proper officers of the Vestry. It is to be inferred, however, that the Vestry have not made any arrangement under the Poor-law Amendment Act of 1879 for the admission of non-pauper cases to the asylum hospitals. The Vestry concerned have, in fact, evaded their responsibilities in this respect, and the Local Government hold that the Asylums Board are not justified in receiving patients who are not paupers. The Poor-law Amendment Act of 1879, so far as relates to facilitating the admission of non-pauper patients to the Asylums Board hospitals, has proved a failure, and the question of hospital isolation of cases of infectious diseases in its general public-health aspects, and not as a poor-law matter only, has still to be solved. Is it hopeless to look for a statesman with capacity and courage sufficient to relieve the metropolis from this discreditable administrative muddle?

## QUEENSTOWN WATER-SUPPLY.

Recently the engineering inspector of the Local Government Board for Ireland held an inquiry at the Town-hall, Queenstown, as to the present supply of water to this town. Evidence was given as to the inadequate supply by various witnesses. Dr. R. Townsend, one of the dispensary medical officers, stated that in the district of which he had charge there was but one well available, and one public fountain from which water could be obtained only for a short period every day. The town commissioners have applied to the Local Government Board to carry out a scheme for improving the water-supply, as they believe that the water company is unable to meet the wants of the inhabitants.

## COTTAGE HOSPITALS.

Dr. Paget Blake, R.N., recently brought before the Plympton St. Mary Board of Guardians (whether sitting as guardians or as the rural sanitary authority does not appear) the question of establishing a cottage hospital for the isolation of cases of infectious diseases in each district of the union. He advanced most excellent arguments in

favour of this being done, but the guardians appeared to have so hazy a knowledge of their respective duties in the matter under the poor-law and the public-health law, and of the mode of reconciling their responsibilities under the two series of laws, that the discussion proved abortive. From the remarks made by the clerk, in the progress of the meeting, it would appear that the Local Government Board has not been unmindful of the wants of the district in respect to hospital accommodation for cases of infectious diseases, and has intimated that such accommodation must, when provided, be kept entirely apart from the workhouse.

### BOURNEMOUTH.

We congratulate the Bournemouth Commissioners on the step they have taken for making all who are concerned in their district familiar with their newly adopted regulations relating to house-drains in communication with the public sewers. These regulations are founded upon the model bye-laws of the Local Government Board, and they have been printed for circulation, accompanied with drawings illustrative of the mode of carrying out in detail the regulations. The drawings are clear, readily comprehensible, and serve admirably to show the thoroughly sound principles upon which the regulations have been formed. We trust that the good example set by Bournemouth in this respect will be followed by other health resorts.

### SUBURBAN DWELLINGS.

We are glad to learn that the Edmonton Local Board have instituted proceedings against, and successfully prosecuted, a builder for using as mortar a compound chiefly consisting of common mould in the construction of houses. We welcome any indications of activity on the part of local authorities in the suburbs in endeavouring to grapple with the serious sanitary evils attaching to much of the building operations going on there, and which, we believe, are in no place to be found more glaring than in Edmonton.

### THE ADULTERATION OF MILK.

The numerous instances recorded in the public press of prosecutions by sanitary authorities for milk adulteration lead to the conclusion that such adulteration must prove a very profitable process. An instance recently occurred in Manchester, where a milk-dealer was charged for the eighth time with adulterating milk, or for offences connected therewith. He was fined £20, and it appears that the total fines he had paid for the offence, including the fine last inflicted, amounted to £110, irrespective of the costs of the prosecutions.

On the 3rd instant Mr. Alderman Bennett, of Liverpool, had presented to him by Viscount Sandon, M.P., in the name of numerous friends, a testimonial and address in recognition of his municipal services, and as token of the esteem in which they held him. Our readers will learn with surprise that among the "services" Mr. Bennett was deemed to have rendered to the borough, was his strenuous support to the project of supplying Liverpool with water obtained locally from the red sandstone;—in other words, from wells within the limits of the borough, as against the Rivington Pike scheme; and his opposition to the introduction of water-closets in the smaller classes of property; referring, we presume, to the introduction of the trough water-closet which is understood to have worked so admirably, and which is known as the "Liverpool trough-closet."

A Fulham pauper, an inmate of the workhouse there, has complained to the Local Government Board, in respect to the diet he receives, as follows: "We get hot water without any sugar in, and on pudding days we get no suet in the pudding, and not half done, it is like putty soup; and stew days we get some smashed bones, and not any herbs in it, only a few old onion-stalks, and that is very seldom. I only get meat once a week, and when I get it I cannot eat it, and we do not get weight. . . . The food is not properly cooked at all."

At Barmouth (Merionethshire) bathing appears to be permitted in primitive guise and in friendly association, male and female; and so attached is the so-called sanitary authority to the locally produced filth, that it proposes to turn the sewage of the place into the harbour, so that visitors may not suffer by being subjected to too sudden a change in passing from the filthy air of the town to the purer air of the sea-shore.

The autumnal outbreak of letters to *The Times* on the water-supply of rural districts and water-supply generally, although briefer than customary, has not been useless. It is rare for a correspondent not to state some fact or express some opinion worthy of consideration. The instructional aspect of this correspondence, which we are now fairly justified in looking for annually, cannot well be overrated.

Dr. Kelly, medical officer of health for the West Sussex combined district, has recently submitted to the Horsham Rural Sanitary Authority a report showing excessive pollution of the river Arun, owing to the defective outfall of the new sewage farm of the urban sanitary district of Horsham. The stream below the outfall is described as a black, thick, unbearably offensive fluid.

A correspondent of the *Daily Telegraph*, writing to that journal on drainage and health, makes the following pithy statement:—"My experience of country places points to the blunt truth of a remark I once heard, 'A man buys a plot of land, builds a house, and digs two holes; out of the one he drinks, and into the other he casts all manner of dirt and refuse.'"

The *Cambrian News* is righteously wrathful with the combination of physical and moral filth to be found in Aberystwith, and takes the local authority soundly to task for its neglect in this matter.

## VITAL STATISTICS.

### HEALTH OF ENGLISH TOWNS.

THE recent decline of temperature caused a slight decline of urban mortality last week. In twenty of the largest English towns, estimated to contain in the middle of this year seven and a half millions of persons, or nearly one-third of the entire population of England and Wales, 4814 births and 3591 deaths were registered last week. The births were 371 below, whereas the deaths exceeded by 316 the average weekly numbers during 1879. The deaths were 52 fewer than those returned in the previous week, and were equal to an annual rate of 25·0 per 1000 against 24·6 and 25·4 in the two preceding weeks. The lowest death-rates in the twenty towns last week were 16·7 in Plymouth, 20·0 in Bristol, 20·5 in London, and 25·7 in Portsmouth. The rates in the other towns ranged upwards to 34·3 in Liverpool, 35·6 in Hull, 35·9 in Norwich, and 36·5 in Leicester. The high rates in these last-mentioned towns were mainly due to excessive zymotic fatality. During the eleven weeks ending last Saturday, the death-rate in these twenty towns averaged 23·3 per 1000, against 24·3 and 18·2 in the corresponding periods of 1878 and 1879.

The deaths referred to the seven principal zymotic diseases in the twenty towns, which had been 1120 and 1190 in the two preceding weeks, declined to 1009 last week. Of these 818 resulted from diarrhœa, 94 from scarlet fever, 59 from whooping-cough, and 58 from fever, principally enteric. The annual death-rate from these seven diseases averaged 7·4 per 1000 in the twenty towns; it was but 3·9 and 4·2 in Brighton and Plymouth, while it ranged upwards in the other towns to 17·3 in Leicester, 17·4 in Hull, and 18·8 in Norwich. Scarlet fever showed the largest proportional fatality in Sunderland, and enteric fever in Sunderland and Portsmouth. The 18 deaths from diphtheria included 12 in London and 2 in Manchester. Diarrhœa fatality was somewhat lower than in the previous week; the annual death-rate from this disease averaged 8·2 per 1000 in the nineteen provincial towns, while in London the rate was but 3·1. Among the nineteen towns, the diarrhœa death-rate ranged from 3·4 and 3·5 in Brighton and Plymouth to 15·3 in Leicester, 15·7 in Hull, and 15·8 in Norwich. Small-pox caused 3 more deaths in London. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily declined from 200 to 104 in the eight preceding weeks, rose to 116 on Saturday last, and 27 new cases of small-pox were admitted to these hospitals during the week, against but 7 and 13 in the two previous weeks. The Highgate Small-pox Hospital contained 9 patients on Saturday last.

The deaths referred to diseases of the respiratory organs in London, which had been 152 and 124 in the two preceding weeks, rose again to 153 last week, although they were still 6 below the corrected weekly average; 91 resulted from bronchitis, and 45 from pneumonia. The annual death-rate

from lung-diseases was equal to 2·2 per 1000 in London, against 4·6 in Liverpool, and 3·4 in Salford.

### HEALTH OF SCOTCH TOWNS.

In eight of the largest Scotch towns, having an estimated population of rather more than a million and a quarter persons, the annual death-rate last week averaged 20·3 per 1000, against 19·3 and 18·2 in the two preceding weeks; this rate was 4·7 per 1000 below the average rate in the twenty large English towns. The rates in the eight Scotch towns ranged from 14·4 and 16·9 in Dundee and Leith, to 25·6 and 39·0 in Greenock and Perth. The fatal cases of the seven principal zymotic diseases in the eight towns were 163, against 130 and 129 in the two preceding weeks; they included 69 from diarrhœa, 36 from scarlet fever, 23 from whooping-cough, 17 from fever, principally enteric, 12 from diphtheria, 6 from measles, and not one from small-pox. The annual death-rate from these seven diseases averaged 6·6 per 1000 in the eight towns, which, although showing an increase upon the zymotic rate in recent weeks, was 1·8 per 1000 below the rate from the same diseases last week in the large English towns. The excess in the English zymotic death-rate was entirely due to the greater fatality of infantile diarrhœa. The zymotic death-rate in the Scotch towns last week ranged from 3·6 and 4·2 in Leith and Paisley to 7·8 and 8·1 in Perth and Edinburgh; the excess in the zymotic rate was due to diarrhœa in Perth and to scarlet fever in Edinburgh. The fatal cases of diarrhœa in the eight towns, which had been 65 and 63 in the two previous weeks, were 69 last week, and equal to an annual rate of but 2·8 per 1000, while in the twenty English towns the diarrhœa death-rate averaged no less than 5·7. The largest proportional fatality from diarrhœa in the Scotch towns occurred in Perth and Aberdeen. The 17 deaths referred to fever showed a further increase upon recent weekly numbers, and included 10 in Glasgow and 2 each in Edinburgh, Dundee, and Aberdeen. Fever fatality last week was greater by 73 per cent. in the Scotch than in the English towns. Scarlet fever also showed an increased fatality in the Scotch towns last week, causing 36 deaths against 22 and 18 in the two previous weeks; 15 occurred in Edinburgh (against 8 in the previous week) and 12 in Glasgow. Seven of the 12 deaths from diphtheria occurred in Glasgow, and 2 both in Edinburgh and Greenock. The deaths attributed to acute diseases of the lungs (bronchitis, pneumonia, and pleurisy) were 61 last week in the eight towns, against 65 and 60 in the two preceding weeks; the annual death-rate from these diseases was equal to 2·5 per 1000, against 2·0 in London.

### HEALTH OF DUBLIN.

The excessive death-rate in Dublin showed a considerable increase last week. The annual death-rate in the city, which had been equal to 35·5 and 34·7 in the two preceding weeks, rose last week to 39·3, a higher rate than has prevailed in any week since the beginning of June. During the past eleven weeks of the current quarter, the death-rate in the city has averaged no less than 34·1 per 1000, against 21·5 in London and in Edinburgh. The 237 deaths in Dublin last week included 78, or nearly 33 per cent., which were referred to the seven principal zymotic diseases, exceeding the number of these deaths in any previous week of the year; 38 resulted from diarrhœa, 12 from whooping-cough, 10 from measles, 9 from scarlet fever, 7 from fever, and one each from small-pox and diphtheria. The annual death-rate from these seven diseases was equal to 12·9 per 1000 in Dublin, while it did not exceed 4·7 in London, and 8·1 in Edinburgh. The 38 fatal cases of diarrhœa in Dublin exceeded the number returned in any week for this year, and were equal to an annual rate of 6·3 per 1000; the diarrhœa death-rate in London did not exceed 3·0 per 1000. The deaths from measles and whooping-cough showed a marked increase in Dublin last week; while those from scarlet fever and enteric fever differed but slightly from those returned in the previous week. The rate of infant mortality showed a considerable decline in Dublin last week.

### SUICIDES IN LONDON.

The Registrar-General's returns show an unusual excess in the recent recorded cases of suicide in London. During the three weeks ending last Saturday no less than 38 cases of suicide were registered in the metropolis, whereas the average number in the corresponding period of the ten years 1870–79, after correction for increase of population, is but 17. The London suicides in the past three weeks have, therefore, been more than twice the average number. Eleven suicides were effected by drowning, 9 by cut or stab, 8 by poison, 6 by hanging, only one by gunshot, and in three other cases the mode of suicide was indefinitely described. No record of assigned causes of suicide is attempted, but even if it were very little assistance would be rendered in the way of ascertaining the true cause of the recent increase of suicides in London.

## HEALTH MATTERS GENERALLY AT HOME AND ABROAD.

### THE LONDON FOG OF NOVEMBER, 1879, TO FEBRUARY, 1880.

In a paper of very considerable interest, published in the recently-issued quarterly part of the *Journal of the Scottish Meteorological Society* (vol. v., pts. 49–53), Dr. Arthur Mitchell has endeavoured to show the influence on the death-rate of London of the very remarkable period of fog which occurred in the metropolis from November, 1879, to the first week of February, 1880. He writes of the fogs of this period as forming, in fact, one continuous fog, "constituting one of the most remarkable fogs on record in this country." From an analysis of the Registrar's Weekly Returns during this period he arrives at the following general results:—

(1) The whole death-rate was enormously increased. (2) No approach to so large an increase of the death-rate showed itself in any of the other British large towns for which we have weekly returns; and in connexion with this it is to be remarked that in none of them did fog of a noteworthy character occur. (3) Asthma is the disease which appeared to be most directly influenced in its fatality by the fog. In the first three weeks of 1880, when the fog more or less completely disappeared, the deaths from this disease fell at once to about 30 per cent. below the average, having previously risen in the middle of December, when the fog was severe, to 43 per cent. above the average, and rising again in the end of January and beginning of February, when the fog was densest and most persistent, to 220 per cent. above the average. When the fog finally disappeared, as it did after the end of the first week of February, the deaths fell to 40 per cent. below the average for the latter half of the month. (4) The deaths from bronchitis, pneumonia, pleurisy, and other lung diseases were greatly influenced in their number by the fog, but did not show the close and direct obedience to the varying density and persistence of the fog which the deaths from asthma showed. (5) In the case of whooping-cough, as was to a certain extent true of bronchitis, the pernicious effects of the fog continued to manifest themselves in an increased mortality during the whole period, and did not disappear, as in the case of asthma, during the temporary abatements of the fog. (6) The deaths from rheumatism did not show any clear relation to the fog, and the same thing can be said of the deaths from croup. (7) Other causes of death showed no very striking relation to the varying density and persistence of the periods of fog.

### PELLAGRA.

A correspondent of the *Pall Mall Gazette*, writing from Venice, under the date of Sept. 1st, gives some interesting information about the prevalence of pellagra in the Lombardo-Venetian provinces. The number of pellagrosi in these provinces is estimated at no less than 100,000, and even this number is held by "one of the most practical writers on economical and social questions" as falling short of the reality. He describes briefly the state of the pellagrosi in the Santo Clemente Asylum at Venice, of which 500 of the 1000 beds it contains are occupied by sufferers from the disease. The malady is attributed to bad and insufficient nourishment, and particularly to an exclusive use of maize, especially of spoiled maize. The Mantua Commission on the subject suggest the formation of a committee in every commune, consisting of the syndic, a doctor, the president of the Congregation of Charity, and one agriculturist. The duties of this committee would be to supply all who were threatened by pellagra with proper food and medical care in their own homes or in a poorhouse; to open a bank of credit to assist the small peasant proprietors, small farmers, and day labourers; to transmit to the provincial deputation a

monthly report; and so forth. Upon this suggestion the *Pall Mall* correspondent observes: "Now, had these proposals been made to ward off cholera, small-pox, or any other contagious disease, they would at once have been accepted; but for a disease proceeding from misery, only affecting the poorest classes, never even menacing the well-to-do members of society, the very idea was scouted as anarchical. Hence pellagra flourishes and increases in the north of Italy, as do the Camorra, brigandage, and the Maffia in the south."

### THE MASSACHUSETTS STATE BOARD OF HEALTH.

We should regard with profound regret the last (the eleventh) report of the State Board of Health of Massachusetts, now lying before us, if we did not feel assured that the Board had simply undergone a transformation, and that in the first annual report of the State Board of Health, Lunacy, and Charity of Massachusetts, it reappears in another, and, we presume, more influential form. The cessation of the reports of the former State Board would have been regarded as a serious loss to the literature of public hygiene, if it were not (as we are wishful to believe) that the new Board will no doubt continue to report in the same fashion, and, as we hope, with wider opportunities of enriching public-health literature. The eleventh report of the State Board, which relates to the six months ending June 30th, 1879, announces the transformation of the Board, and contains a report of certain cases illustrative of the law relating to noxious and offensive trades, and a series of instructive circulars issued by the Board on disinfection, care of young children, house drainage, &c. But the main bulk of the report is occupied by an index to the complete series. The first annual report of the existing Board is devoted to a description of the organisation of the Board, its several duties in relation to public health, lunacy, and pauperism, the laws under which it acts, and sundry papers relating thereto. The report is of considerable interest with reference to these matters.

### THE WATER-SUPPLY OF LIMERICK.

The Corporation have under their consideration several schemes for a proper supply of water to this town, which at present is inadequate as regards quantity, while the quality is very inferior. The schemes are ten in number, and the estimate for the lowest will require an outlay of about £46,000. One plan proposes to bring the water from the river Clare, distant a dozen miles; another from the Mulkear river, flowing by gravitation to the local reservoir. A third suggests the Shannon, and to pump the water by steam-power into the service reservoir; while Doonas Falls, Castleconnel, and Lough Gur are other sources proposed for a water-supply. It will thus be seen that two methods are suggested—viz., by pumping and gravitation; but it is believed that the former method will be more suitable, more especially if the supply is obtained from the river Shannon. The Corporation will meet this week to decide on the course they will adopt in reference to the plans proposed.

Two cases of typhoid fever—one affecting a prisoner, the other a gaoler—are reported under somewhat anomalous circumstances in connexion with the Wormwood Scrubs prison. The prisoner died, and in the course of the inquest held on the cause of death it was stated that the prison was much exposed to nuisance from piggeries in the neighbourhood. The cases will, no doubt, be made the subject of official medical inquiry.

At the recent Trades' Union Congress, held in Dublin, the question of "woolsorters' disease" was discussed, and a resolution adopted, by a large majority, that the Parliamentary Committee of the Union be requested to continue their exertions with a view of obtaining protection for woolsorters against blood-poisoning (septic, that is) whilst following their occupations.

Sir Henry A. Hunt, C.B., has made his final award in respect of property to be taken compulsorily in Wolverhampton under the Artisans' Dwellings Act. The scheme provides for the outlay of £250,000 in making improvements in the centre of the town. The total value of the property arbitrated upon amounts to about £60,000.

A very fatal epizootic is reported among the crayfish in Bavaria.

## MANCHESTER "SLUMS" AND AIR.

THE Manchester correspondent of *The Times* has been endeavouring to elucidate in the columns of that journal several of the great local questions, touching social matters, which at the present time are occupying the attention of the citizens of our northern metropolis. He has concerned himself particularly with the subjects of the housing of the labouring classes in the city, and with its air in relation to out-door exercise and to art. As regards "art," and the contending views of the Manchester folk and their Corporation with reference to the best methods for its greater development in the city, and how these views may be affected by the ordinary constitution of the city's air, these do not concern us here; and as regards the provision of facilities for out-door exercise and open-air recreation, this is an obvious need, and the Corporation would appear to have not been wholly unmindful of the requirements of the population in this respect. Nothing is said of the prospect of purging to a greater extent than has yet been done Manchester air of the dense volumes of smoke which from Monday morning to Saturday noon intermingle with the atmosphere, too generally reducing daylight to a dismal sort of twilight. The question of the slums has perhaps the most immediate interest for the medico-sanitarian and student of public health. It is well known that the Corporation of Manchester has been for some time depending upon the ordinary changes in progress within the city for the relief of those conditions attaching to the older parts of it most inimical to the health of its inhabitants. As the central parts have become more and more devoted to business purposes, the inhabitants have been displaced, and have moved to the outer and less thickly populated parts of the borough. The older, unwholesomely constructed and arranged cottages vacated have been cleared away to give place to warehouses and public buildings, and the displaced inhabitants have found house-room in the more open districts, where they are scattered comparatively widely over the ground, and are housed in dwellings constructed with a stricter regard to health principles. This migration to the outer districts has been largely assisted by a corresponding transference of manufactories to the same districts, rendering it in a measure necessary that the workpeople engaged in them should follow and establish their residences near at hand. The changes here noted have been proceeding so steadily of late years, and at so considerable a rate, that if we understand the question aright, the Corporation, under the advice of the medical officer of health, Mr. John Leigh, have determined not to interfere, but suffer them to proceed without interruption, and leave the present many defective conditions of cottage dwellings in central Manchester to be done away with, as they must be in a comparatively short time, by the natural operation of the business and social changes going on in the city. In so doing, it is argued the desired changes will be, as it were, insensibly effected, and with less difficulty to the displaced population, less danger of contingencies, such as dangerous overcrowdings of already occupied dwellings in the process of displacement, and greater certainty that the change would be made in such a way as would contribute best, from the public-health point of view, to the permanent well-being of the population. Of the soundness of the view here taken, assuming the facts to be as stated (and these scarcely admit of doubt as given in Mr. Leigh's reports), there can hardly be a question. It is the view of a statesman grafted on that of a public health reformer. But, meanwhile, what remains of the old cottage dwellings of Manchester shocks every sense of residents there who take an active interest in the sanitary reform of the city, and who are not prepared to relegate attempts at amendment to an indefinite future. They regard with irritation the refusal of the Corporation—unlike other great towns, Birmingham for example—to take advantage of general or special Acts of Parliament for clearing areas covered by unhealthy houses, and erecting thereon, or permitting others to erect, model dwellings for the labouring classes. They would anticipate the natural progress of the changes on which the Corporation depends. They have a righteous impatience of delay which begets every sympathy in view of the evils which they would eradicate; and, incited by

Dr. Arthur Ransome and others, they have taken the inhabitants generally into consultation with them, and after a fashion declared war against the Corporation notions. The form which this movement has assumed gives little hope that it is sympathised with to any large extent in Manchester, or that it will lead to any marked result in accelerating changes which both the Corporation and the citizens must desire to see completed. It has resulted in a proposition to form a limited liability company for providing improved dwellings for the labouring classes, with a capital of £20,000 in 4000 shares of £5 each. This is modestly spoken of as looking "at least like a step to business." But in view of the magnitude of the task to be undertaken and of the wealth of Manchester, does not this seem rather like another version of the "mountain in labour"? At least it would indicate that the time for inaugurating this movement has been very badly chosen. In discussing the question of art and public park accommodation in Manchester, *The Times'* correspondent writes of the Corporation as being hampered as to means. We know how difficult it has been found by the managers of the Royal Infirmary to get together from the inhabitants a sum barely sufficient to effect absolutely necessary alterations in the institution presumed to be the most cherished in the city. On all sides we hear of a ridiculous inconsistency between the reputed wealth of Manchester and its incapability or unwillingness, in consequence of recent and continuing bad times, to contribute to charitable and philanthropic objects within its own boundaries. We prefer to assume that the petty result of the labourers' improved dwellings movement is another indication of the "hard times" in the district than the result of indifference to the question sought to be solved. That the movement is inadequate to a solution of this question should be obvious, but that it might aid in ameliorating some of the most painful aspects of it, and helping importantly to the final result sought, does not admit of doubt.

# Correspondence.

"Audi alteram partem."

## THE IMMEDIATE TREATMENT OF STRICTURE OF THE URETHRA.

*To the Editor of* THE LANCET.

SIR,—As it has been suggested to me that some misconception might arise respecting the two deaths mentioned in my letter of last week, I take the earliest opportunity of stating that I only referred to those mentioned by Mr. Wood. There was another death in King's College Hospital in which a false passage was found extending through the neck of the bladder, but this was published years since; and the two deaths that occurred in the Westminster Hospital, also years ago, both resulted from kidney disease.

I have been fortunate enough not to have had a fatal case in private.

Very faithfully yours,

Savile-row, Sept. 20th, 1880. BARNARD HOLT.

*To the Editor of* THE LANCET.

SIR,—I am glad to see that Mr. Barnard Holt has defended his method of treatment of stricture from the aspersions unfairly cast upon it. Having witnessed the great success of Mr. Holt's method whilst his colleague at the Westminster Hospital, I have continued to adopt the proceeding in suitable cases ever since, and I am well satisfied with it. Mr. Holt does not profess that his operation will "cure" what is acknowledged on all hands to be practically an incurable disorder; but I believe with him that a "split" stricture contracts less rapidly than one dilated or divided, and that when it has been allowed to contract it can be readily restored to full size. Since it is allowed that in cases of old-standing stricture, with disorganised kidneys, the mere passing of a catheter may kill by inducing suppression of urine, it is not surprising that death may occasionally follow the use of Holt's dilator under similar circumstances, as occurred to a private patient of my own two years back. Again, if the dilator unfortunately enters a false passage, which is then split up, a consequent death cannot be fairly attributed to the method, though it may be to the operation.

I have before me the very carefully compiled printed annual Surgical Reports of University College Hospital for the last nine years, in each of which a special table of cases of stricture is given. I have collated these carefully, excluding only cases of extravasation of urine (admitted as such), and cases in which no treatment was adopted, with the following results:—

| | | | | | |
|---|---|---|---|---|---|
| Treated by dilatation . . . . | 157 | cases with | 13 | deaths. |
| ,, internal urethrotomy | 130 | ,, | 7 | ,, |
| ,, external urethrotomy | 18 | ,, | 4 | ,, |
| ,, Holt's method . . . | 32 | ,, | 4 | ,, |
| ,, other dilators . . . | 8 | ,, | 2 | ,, |
| Total cases . . . | 345 | ,, | 30 | ,, |

It should be mentioned that the cases of internal urethrotomy include a large number of cases of simple "mentotomy," and also operations by various methods. I believe I may claim nearly all the "Holt's," and certainly the four deaths, two of which were due to false passage, and two to pyæmia. It should also be understood that Mr. Erichsen and Sir H. Thompson gave up all charge of patients early in 1875.

Your obedient servant,

CHRISTOPHER HEATH.

Cavendish-square, Sept. 20th, 1880.

*To the Editor of* THE LANCET.

SIR,—Being the surgeon who first introduced to the notice of the profession in this city Mr. Holt's plan of treating stricture, perhaps you will kindly permit me to say a few words on the subject, and to place on record in your pages the result of my experience of a number of cases, now to be counted, not by units but by hundreds. During all the years I have treated stricture on the immediate plan I have never had one fatal case, nor have I ever witnessed any more untoward consequence of the operation than, in some very exceptional cases, rigors. Every surgeon of experience has met with individuals who could not tolerate the attempt to introduce an ordinary instrument without, as the result, the supervention of rigors. Cases of this kind have come under my care, yet in many of these have I used Mr. Holt's plan without rigors ensuing. This I account for by my having used proper precautions and treatment. Early in this year a gentleman, a victim to stricture, consulted me. That his case was one of no ordinary difficulty can be certified by a gentleman who deprecates in no measured language Mr. Holt's plan of treatment, under whose care the patient was for some weeks in London. Every attempt to introduce an instrument was followed by such spasm as for hours to render him unable to void one drop of urine. I placed him under the influence of methylene, introduced the dilator, and forcibly dilated his stricture to such an extent as to allow of the passage of a No. 10 catheter (Weiss's gauge), a sized instrument which he is now able to pass for himself; yet he did not experience the slightest subsequent trouble. This gentleman called on me within the past week, and told me that, though a perfect stranger to Mr. Holt, he had twice called at his house, but was not fortunate enough to see him; the object of his visit being to express his gratitude to Mr. Holt for having introduced a plan of treatment whereby a life of misery had been converted into one of thorough enjoyment.

That fatal results may be ascribed, but erroneously so, to Mr. Holt's treatment, will be illustrated by what I am now about to state. Last month I had arranged to operate on two cases of stricture on the same morning in the Meath Hospital. On arrival I found one of the patients "seedy," and accordingly put him back, but operated on the other, who left the hospital a few days afterwards master of a No. 10 gum-elastic catheter, which, before my class, he himself introduced into his bladder. But what became of the other patient? The same day he was carried out of the hospital dead. Double pneumonia—rapid effusion; and in spite of the most energetic treatment the poor fellow succumbed. Had I been imprudent enough to operate that morning on that man, doubtless Mr. Holt's operation would have been credited with (or rather discredited by) another fatal result.

In conclusion, I may be allowed to add that my operations

have been conducted in the presence of large classes of students in the Meath Hospital, as well as in private. Were my results less favourable than I have here recorded, there would be plenty of witnesses to bear evidence against the accuracy of my statements.

Your obedient servant,

RAWDON MACNAMARA, F.R.C.S.I., &c.,
Surgeon to the Meath Hospital and to the Westmoreland Lock Hospital.

Dublin, Sept. 18th, 1880.

*To the Editor of* THE LANCET.

SIR,—Having had some considerable experience in the treatment of stricture by sudden and forcible dilatation, I am anxious to corroborate the testimony of Mr. Barnard Holt, in your last impression, as to the safety and efficiency of that proceeding.

I wish to do so because in comparing it with internal urethrotomy it has, in my judgment, been rather unfairly treated by some of the advocates of the latter method.

The disparaging remarks to which I allude consist not so much in argument as in vague condemnation on account of its supposed dangers, and unsupported insinuations of bad faith on the part of those who practise it in concealing unfavourable results. Thus in the late discussion at Cambridge one speaker is reported to have said: "He entirely agreed with the remarks that rupture was a dangerous proceeding. He never did it himself, but he had seen a good number of cases that went to the bad from it, and believed that such a rupture must lead to a traumatic stricture of the worst kind." What these vague statements amount to is shown by Mr. Holt in his letter of last week.

Another speaker on the same occasion said: "There were surgeons who still practised immediate dilatation, and that they did so showed that they were but imperfectly acquainted with the rationale of the operation, and were not aware of the great mortality attached to it." This is certainly true as regards myself. I know little and care less about its rationale, but am content to judge it by its results; while as to the great mortality alleged, I shall disbelieve it until I see some evidence in its support.

The same gentleman further says that, "had the deaths which have occurred after forcible dilatation been published, the operation would long ago have received its *congé*; and he thought the advocates of that method had not acted straightforwardly in omitting to publish them." This is an imputation of bad faith which, entirely unsupported as it is, ought to be discountenanced as altogether out of place in a scientific discussion. I should like to know why this propensity to the *suppressio veri*, if it has any existence, should be supposed to appertain to those who use the dilator rather than to the urethrotomists.

My own experience of the treatment by forcible dilatation may be briefly expressed. I have practised it in all suitable cases of obstinate stricture, both in hospital and private patients for the last fifteen to twenty years, and though I have kept no numerical account, I can safely say that they amount by this time to many scores. In no single instance have I met with a fatal result, or with any subsequent symptoms which gave me cause for serious uneasiness. My experience, in fact, coincides exactly with that of Professor Macleod of Glasgow, who said at the late meeting at Cambridge, "that he had never seen any complication, and no possible danger, follow the use of Holt's dilator when used in cases fitted for it."

I constantly see my colleagues at St. Mary's Hospital using the dilator, but very rarely the urethrotome, and though I, of course, only speak for myself, I assume that they would not continue to use it if they found their cases dying or "going to the bad" in the manner that has been alleged.

I have no wish to decry internal urethrotomy. I have never practised it, and therefore cannot speak from personal experience, but I accept, without reserve, the statements of such authorities as Sir Henry Thompson and Mr. Berkeley Hill as to its satisfactory results and its freedom from danger. I adhere to immediate dilatation because I believe it to be a less formidable proceeding, and because if urethrotomy would do all its advocates claim for it, I do not see that I should get better results than I have been accustomed to obtain from dilatation.

Deaths may now and then occur, and serious consequences may follow, after either operation (as they may happen after any surgical proceeding, however slight), but there is no evidence, that I know of, to show that dilatation is more liable to them than urethrotomy. Bad results will be exceedingly rare in both if cases unsuited to any operation at all are carefully excluded.

No treatment of stricture yet known, whether by gradual or forcible dilatation, by internal or by external urethrotomy, will prevent a recurrence of the complaint, unless the patient will persevere in the use of instruments for a lengthened period. But I have not myself found these relapses more early or more severe in the intractable cases demanding the immediate treatment, than in the milder ones which are amenable to gradual dilatation, or than the more severe ones which are subjected to external urethrotomy, as advocated by Syme, in which latter, as Sir H. Thompson observes, "the diseased structures constituting stricture have been entirely divided, and in a way more certainly complete than any *internal* urethrotomy can offer."

Very faithfully yours,

Norfolk-square, Sept. 20th, 1880. JAMES R. LANE.

## "SIR T. D. ACLAND ON HOSPITAL NURSING."

*To the Editor of* THE LANCET.

SIR,—I am obliged by your kind notice of my few words at Exeter on Hospital Nursing. I need some excuse for intruding on professional ground. I inherit from boyhood a deep respect for the profession. In and out of Parliament I have watched its welfare, or rather that of the nation, for forty years and more.

I ask your leave to explain that I did not mean to deny that there is a desire to introduce sisterhoods in hospitals. Of course I know what is in action at King's College and University Hospitals and elsewhere. My object was to take the first opportunity I could find, as a responsible man in a public position, to stem the torrent of misunderstanding about Guy's, which was current in my own neighbourhood and reacting on our excellent local hospital.

The circulation in *The Times* of a sneer about dress and prayers was accepted by a too credulous public as evidence of ritualistic aims and centralisation which have no place at Guy's. Religious cries are too often simply weapons of warfare in secular battles. The English laity generally find out the truth in time.

What is now needed is that the earnest endeavours of active governors to deliberate freely with able men should not be hampered by the dictation of private meetings pledging a collective body, or by public attacks on women and men who are not at liberty to defend themselves by controversy about their responsible duties in the journals. I had hoped some such result might have been reached before the critical 1st of October. I have worked hard to help it forward. I can only now ask you to allow me, as an individual governor, to appeal to the great body of Guy's men not to be led off on a false scent, to rally round their old school at the opening of this session, and to judge for themselves whether there is any hindrance in respect of medical science, or observation or practice in the way of the students or their teachers.

Your obedient servant,

THOMAS DYKE ACLAND.

Holnicote, Taunton, Sept. 18th, 1880.

## "HOSPITAL ETIQUETTE."

*To the Editor of* THE LANCET.

SIR,—I think any unprejudiced person reading Mr. Ewart's letter on "Hospital Etiquette" must come to the conclusion that there must be a misunderstanding somewhere. Allow me a few lines in explanation of the matter.

The medical officer at our dispensary reported to my colleagues and myself that a case of scarlet fever, with stone in the bladder, was coming to us from St. Mary's Hospital, with the request that the patient might be returned to them for operation. An opinion was expressed that we ought not to accept the case under any restrictions; but no decision was come to, and the matter dropped. The next day the boy was admitted into hospital under my care, and was shortly followed by a hip case, with scarlet fever, from the same quarter. A few days afterwards, Dr. Lloyd Roberts and Dr. Walter called on me on the subject. The former said the stone case had been admitted under his

care, but he had made it over to his colleague, and asked me to send it back to St. Mary's when well of the fever, as Mr. Ewart was anxious to perform lithotomy. I replied "that personally I did not care who had the stone, but I would speak to my colleague, Mr. T. Jones, and I had no doubt if I did so he would waive any claim he might have." On another occasion, when Dr. Lloyd Roberts was in my house about another matter, I suddenly remembered the case, and said, "Oh, that stone case is doing well; I must remember to see about him for you." I also told the boy (aged ten) that he might tell his mother that when he was no longer infectious she might take him back to St. Mary's. Now, about this time it happened that Mr. Jones, in consequence of the illness of a relation, was a good deal from home, and was much taken up by other pressing engagements; I seldom saw him, and, most unfortunately, it entirely slipped my memory to set matters straight about the stone. A few weeks afterwards I left home at a short notice, and unluckily the operation was performed by my colleague in complete ignorance of my interview with Dr. Lloyd Roberts. On my return I was exceedingly annoyed with myself for not having left special directions concerning the case. I took an early opportunity of explaining to Dr. Lloyd Roberts what had happened, and expressed my great regret that I should have been so forgetful in the matter, and how I would willingly take upon myself the blame of what had occurred. I must say, Sir, that after thus expressing my regret I never for a moment expected to hear any more of the matter. I was surprised to hear that it had become a burning question of "hospital etiquette;" and still more astonished was I to read that Mr. Ewart had "learnt that from the first the Pendlebury staff never meant the boy to return to St. Mary's." Let me say at once this is untrue. The case was admitted under my care, and except on the occasion just referred to I never spoke to my colleagues on the subject. I am unaware of any decision affecting its destiny, and had I not forgotten to speak to my colleague I do not doubt it would have returned to St. Mary's.

Having thus apologised to Dr. Lloyd Roberts, to whom the case belonged, and who had specially called on me on the subject, what more, Sir, could I do? I am sorry Mr. Ewart was disappointed and annoyed, but if he is still angry I cannot help it; and if he still impute bad faith to me, I have no more apologies to make, and will willingly leave it to the "sentiments of the profession" to decide, to whom the "discourteous" and "ungenerous" apply.

I remain, Sir, yours, &c.,

Manchester, Sept. 21st, 1880. HENRY ASHBY.

*** We are glad to receive this explanation, which will, of course, close the matter.—ED. L.

## "NEW INSTRUMENT FOR CLEFT PALATE."

*To the Editor of* THE LANCET.

SIR,—Having read Mr. Furlong's description of his needle on the shuttle principle in THE LANCET of September 18th, I hasten to concede to him whatever credit may be due for priority of invention over the instrument on the same principle devised by me, a description of which appeared in THE LANCET of July 24th. I would also express my appreciation of the additional miniature blade for isolating the tissues during perforation, which is part of his instrument, and is a deficiency in my own which I was even now attempting to supply.

At the same time it is due to myself to state that, previously to forwarding my communication, I had taken every pains to ascertain whether the idea as it occurred to me had been already carried out. It was only after failing to discover any knowledge of such an instrument either on the part of those surgeons to whom I showed mine, or of the instrument makers, and after a vain search through every accessible record of surgical appliances, that I forwarded it for publication. This general ignorance respecting the existence of Mr. Furlong's invention cannot be wondered at, as he states "there is no published account" of it. I think, therefore, Mr. Furlong will have no cause to regret the step I took in calling attention to a needle on the shuttle principle, I being absolutely ignorant of his invention—inasmuch as my so doing has served to rescue his from the undeserved oblivion into which he had suffered it to lapse.

Respecting the points of divergence between the two instruments, whether the blades should be scissors or forceps, the method of fixing the needle on the one blade and of clamping it in the other, these are matters of detail concerning the respective advantages of which experience alone will enable a correct estimate to be formed. What is of more importance to know, and which Mr. Furlong's experience goes to prove, is that the irksomeness of cleft palate operations can be lessened by the use of an instrument which his ingenuity had already devised when I was labouring to attain it. Had it not been for Mr. Furlong's reservation of his skill I should have been spared this labour, and your columns the tedium of a personal explanation.

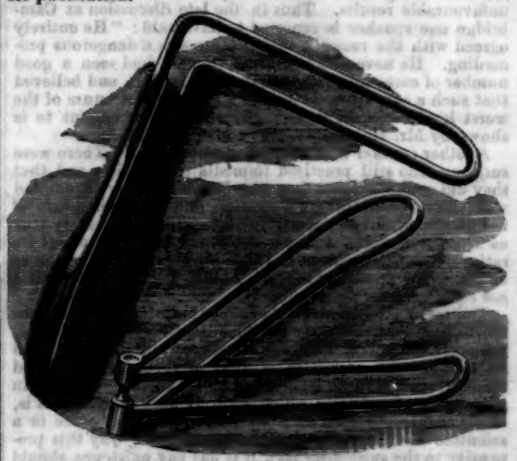
I remain, Sir, yours, &c.,

London, Sept. 20th. ED. WOAKES, M.D.

## A TONGUE-DEPRESSOR.

*To the Editor of* THE LANCET.

SIR,—In bringing forward the accompanying pattern of a tongue-depressor, I do not claim for it any undue amount of importance; but as it is a little instrument in frequent requisition, I have devised the present form, and, finding it so convenient after twelve months' use, send you a pattern for publication.



The advantages it possesses over the ordinary clumsy instrument are, that the tendency to retching is lessened by the smaller surface of metal inserted into the mouth. The tongue is not concealed by it; and with patients who have the knack of "hawing up" the tongue, the sides of the instrument, which press into its substance, admit of a view of the fauces, which would be impossible with the old instrument.

I have found it useful in the examination of the irritable throat of phthisis, where the ordinary mass of metal introduced into the mouth renders a view impossible by reason of the discomfort and irritation produced. It is light and portable, of much less cost than the ordinary form, and easily cleaned.

The woodcut represents one pattern with a handle for hospital use, and the other jointed for the pocket. These have been made for me by Mr. Goode, of Praed-street.

I am, Sir, your obedient servant,

Sutherland-gardens, W., September, 1880. ALFRED WISE, M.D., Visiting Physician to the Infirmary for Consumption, Margaret-street.

## DIPHTHERIA.

*To the Editor of* THE LANCET.

SIR,—In the spring of last year (1879) I attended during an outbreak of diphtheria a family consisting of five persons—viz., father, mother, two little children, and a young servant girl.

The servant showed symptoms of the disease on March 22nd; it ran a favourable course, and she was convalescent on the 29th.

The youngest child, aged two years and three months, was seized on April 13th, and died on April 20th.

The other child, aged five years, was taken ill on April the 18th; she recovered to some extent, but after lingering till May 31st she died from blood-poisoning and paralysis.

The mother also became ill on April 18th, but recovered; and the father escaped with the exception of slight sore-throat.

I myself contracted the disease whilst attending them, but had little more than the local symptoms, and was well in a few days. The drains were said to have been recently examined.

Owing to a leakage of sewage into the basement, it has just been discovered that the drains of this house and those of the next have one common exit into the sewer. The people next door, having had their water cut off more than three years ago, have since been using only what they could beg from neighbours, the natural result being the blocking up of the common drain-pipe, and probably causing the outbreak related above.

As under the present system of drainage this is a danger that may attack any of us, it does not seem to me unreasonable to ask whether the water companies, possessing as they do the monopoly of supplying us with what is a necessary of life, should be permitted to enforce payment of their rates by cutting off that supply, thus seriously endangering the lives of a whole neighbourhood, and, as in the present case, punishing not so much the defaulter as a man who owed them nothing, but who is, nevertheless, in all probability doomed to end his days childless.

I remain, Sir, yours truly,

Brixton-road, August 18th, 1880. H. J. F. GROVES.

## THE SERVICES.

### MEDICAL OFFICERS FOR AFGHANISTAN.

The following medical officers of the Madras Army have been ordered to proceed on service to Afghanistan:—Surgeon-Majors A. C. Gaye, J. M. Cogan, E. A. Roche; Surgeons J. Mulrenan and A. Kirwan; also Surgeon-Majors F. C. Reeves, H. Jagoe, R. M. Bradford, John North, and J. Elcum, of the Indian Medical Service.

Surgeon-Major H. L. Bruce, Indian Medical Service, has been appointed Principal Medical Officer of the Reserve Division, Southern Afghanistan Force, with the temporary rank of Deputy Surgeon-General.

Deputy Surgeon-General Thomas Wm. Fox, M.B., has been appointed on promotion Principal Medical Officer of the North British District, Edinburgh, vice Deputy Surgeon-General J. S. Furlong, transferred to Nova Scotia.

The *Gazette of India* of the 14th August announces that the Viceroy has appointed Surgeon-Major J. M. Cunningham, M.D., Sanitary Commissioner with the Government of India, to be Surgeon-General Indian Medical Service, with permanent rank from the 29th March, 1880, in succession to Surgeon-General J. F. Beatson, M.D., retired.

ADMIRALTY.—Surgeon W. J. Lightfoot has been appointed to the *Serapis*.

## INDIA.

*(From an occasional Correspondent.)*

DURING the early part of the hot weather an epidemic of diarrhœa, remarkable for the impartiality of its attacks, prevailed at Simla. As the disease did not, fortunately, prove fatal, people could afford to make light of the matter, and the "prevailing ep.," as the epidemic was familiarly called, became a standing joke, as "five o'clock beef-tea" at the club became a standing institution. So general was the epidemic, that it is stated more than 300 prescriptions for the complaint were dispensed by one druggist's establishment in one afternoon. Guests had to quit the dinner-table in a hurried and undignified manner, and at one large official dinner more than half the invited guests sent excuses at the last moment. A curious point about the epidemic was that scarcely any children, and but comparatively few ladies, suffered. The new Simla water-supply was in some quarters accused of causing the outbreak, but the partiality shown by the disease would indicate some other cause. The Army Sanitary Commission, which appears to be little else than the Sanitary Commissioner with the Government of India "writ large," has given publicity to some astonishing statements which (I am glad to see) have been challenged by a writer in the *Pioneer*, August 7th. The Sanitary Commissioner states: "It is no part of our duty to enter on etiological controversies, but when facts of this kind present themselves it becomes our duty to call the attention of the authorities in India to them, and to point out that the occurrence of cases of cholera among the population using Vehar water and the high death-rate among them are in direct contradiction to the water theory. This fact has been already recognised by the Calcutta authorities, and, fortunately for the advance of public health improvements, the Indian authorities are too acute to be led astray by European disease theories, and they know how to deal with theorists. Calcutta and Bombay have both better water supplies than London, and both suffer from cholera." This writer remarks:—"The commission do not seem to be aware that large tracts of Calcutta lie outside the field of the new water supply, and that most of the cholera deaths that now occur take place among the poor and dense populations who reside on these tracts. But even within the field of supply the difficulties under which the poorer classes lie in getting the filtered water are so great that a large quantity of very foul water is in daily use among them. Referring to an outbreak of cholera in Hastings-street, Calcutta, the health officer, in a recent report, thus writes: 'A police guard was stationed on the bank (of Tolly's *nulla*), not to prevent bathing, for this was out of the question, but to caution the people against the further use of the water. The engineer was ordered to prepare estimates for doubling the number of hydrants.' This *nulla*,[1] in which tens of thousands of people bathe, from having no better water convenient for the purpose, is little better than a foul sewer. Its water is defiled by the drainage of many public and innumerable private latrines, and by the discharge of many sewers which do not communicate with the new main sewer. Another defect in the new water supply arrangements is that the supply is turned off at night, and the consequence of this is that careless, improvident people, who have no storage arrangements, have to resort for water after sunset to the innumerable foul tanks on which Dr. Payne has been waging a noble war of extermination for some years. Such is the water-supply which the Army Sanitary Commission—in its eagerness to discredit 'European disease theories,' propagated and popularised by men like Parkes and Simon—say is better than the water-supply of London! I lately heard of a remarkable testimony to the value of the new Calcutta water-supply in preventing cholera. It was that of the chaplain whose duty it was to minister at the burial of Europeans. This gentleman noticed that with the introduction of the new water his work suddenly became much less, owing to the almost entire cessation of cholera among European *residents*, as the disease was now nearly confined to the sailors living on the river, who continued to use the Hooghly water as before."

What the condition of the Bombay water-supply was during the hot weather of the present year is best seen from the following extract from the *Times of India* (*Pioneer*, July 22nd, 1880): "The almost complete failure of the Tulsi water system during the past hot season, and the narrow escape which the city had from the evils and inconveniences of a water famine, have naturally excited much attention. Even in the early part of May the enormous quantity of water which had been drawn off from the Tulsi lake had reduced the water to an alarmingly low level; and as the month wore on it became more and more apparent that, unless the strictest care was exercised in the distribution of the water in hand, a total stoppage of the supply was imminent. Consequently the water was only admitted into the city at certain short intervals, and then in comparatively small quantities. As day succeeded day, and as the level in the lake got to be lower and lower, it became more manifest that unless the rains arrived at an early date the city would be subjected to a dearth of water

[1] A watercourse.

during a period when pure and wholesome water was most essential to the well-being of the people. As the end of the hot season approached, the quality of the fluid sent through the mains into the city was very bad, and the bath tubs of households were charged with a quantity of solid matter which could not be separated from the water by any amount of filtration. The Vehar supply was called in to supplement Tulsi, and in this manner the supply was kept up until the 5th of June, when the monsoon burst, and a heavy fall of some five inches of rain in two days relieved the anxiety of the municipal officers. Of course, such a glaring failure of the water-supply was not to be allowed to pass without comment: Dr. Weir, the Acting Municipal Commissioner, has succeeded in proving that up to the present there was no ground for saying that there had been any miscalculation as to the nature of the Tulsi supply. It has been urged, and with great show of reason, that until the Malabar Hill Reservoir, which is an important part of the Tulsi scheme, has been completed, it is impossible to judge as to the capabilities of the project for supplying the city with water, and that, until the system is carried out in its entirety, any condemnation of the work would be unfair."

Cholera has been prevalent in the Lucknow and Allahabad Districts. The 2-22nd Regiment, stationed at Allahabad, has lost thirty-five men in all. On the 31st of July the epidemic threatened to assume serious proportions, no less than sixteen men and one officer—a young A. M. D. surgeon, Dr. Noad—having been buried on that day. Dr. Noad's case was a sad one. He was a Charing-cross man, who had only arrived in India in March; he was in delicate health, and under the heavy work he succumbed. He was attacked at 2 A.M., and died at eight o'clock next morning, much regretted by all who knew him. He fell at his post.

The outbreak in the 22nd presented some interesting etiological features; but at such times as the onset of an epidemic medical officers have no leisure to institute inquiries into the circumstances connected with the outbreak. The disease was for some days confined to the European infantry, although between it and the native city, where cholera prevailed largely, lay a battery of artillery, which only had one case, and that some ten days after the outbreak in the infantry barracks. Immediately to the north-east of the infantry were the Native infantry lines, where no case of cholera appeared until after the solitary one in the artillery. Every barrack of the 22nd, excepting the hospital, seems to have furnished cases indiscriminately, excepting the two hospital barracks. The women and children also were quite free from cholera. These conditions would, therefore, appear to be strongly opposed to any epidemic wave hypothesis, and they tend to indicate to me food or water contamination as the cause, to which the men of the regiment only, with the important exception of the hospital patients, were exposed. Such a cause might exist in connexion with the canteen, to which all the men, excepting the hospital patients, had access. No officer, excepting Dr. Noad, was attacked. It is stated that at the time of the outbreak there was plenty of money among the men, owing to many of them having re-engaged, and having received the usual bounty.

## A TABULAR VIEW OF THE DAYS AND HOURS OF THE INTRODUCTORY LECTURES

*To be delivered at the different Medical Schools.*

| | Lecturers. | Days and Hours. |
|---|---|---|
| St. Bartholomew's Hospital | (No Lecture) | Oct. 1st |
| Charing-cross Hospital | (No Lecture) | „ 1st |
| St. George's Hospital | Dr. Cavafy | „ 1st, 4 |
| Guy's Hospital | (No Lecture) | „ 1st |
| King's College | Prof. George Johnson | „ 1st, 4 |
| London Hospital | Dr. Andrew Clark | „ 1st |
| St. Mary's Hospital | Mr. Walter Pye | „ 1st 3 |
| Middlesex Hospital | (No Lecture) | „ 4th, 3 |
| St. Thomas's Hospital | Dr. Ord | „ 1st, 3 |
| University College | Prof. Burdon-Sanderson | 4th, 8 |
| Westminster Hospital | Dr. Donkin | „ 1st 3 |
| Durham University | Mr. T. W. Barron, M.A. | 1st 2 |
| Owens College, Manchester | | „ 1st |
| Queen's College, Birmingham | Prof. Bartleet | „ 4th 3½ |
| Sheffield School of Medicine | Dr. Gwynne | „ 1st 4 |
| Edinburgh School of Medicine | Dr. Moinet | „ 25th 11 |
| Aberdeen University | | „ 18th |
| Glasgow University | Prof. Cleland | „ 20th |
| Glasgow Royal Infirmary | Dr. Clark | „ 27th 3 |
| Anderson's College, Glasgow | Prof. Dittmar | „ 20th 2 |
| Queen's College, Cork | | Nov. 1st |
| Queen's College, Belfast | | „ 2nd |

# Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Sept. 16th:—

Dadachanji, Edalji Rustanji, Bombay.
Kinneir, Francis William Edward, Doughty-street.
Lane, Alexander, Bishop's Castle, Salop.
Wasse, Gervas Miles, Nawton, Devon.

The following gentleman also on the same day passed his Primary Professional Examination:—

Harris, John Harry, Guy's Hospital.

At the Preliminary Examination in Arts held at the Hall on Sept. 17th and 18th, 145 candidates presented themselves, of whom 47 passed and received certificates of proficiency in General Education—viz.:

FIRST CLASS.
Florence Nightingale Toms.

SECOND CLASS (in alphabetical order).

| | |
|---|---|
| C. A. Adams. | R. B. Leggatt. |
| R. H. Barrett. | C. E. Liesching. |
| E. D. Bell. | Emma M. D. Miller. |
| F. Brightman. | Paul von Nordeck. |
| E. H. Brock. | G. C. H. Norman. |
| G. T. Cattell. | A. C. A. Packman. |
| Kate Crooke. | Jiteudja N. Pálit. |
| H. W. Denton-Cardew. | T. J. Palmer. |
| R. Dobson. | E. W. Paul. |
| T. U. Duer. | W. J. Procter. |
| W. B. Felton. | Edmund Raghib. |
| G. W. H. French. | H. V. Rake. |
| A. J. Gibbon. | H. E. Rayner. |
| Edwin Gill. | A. Y. Reily. |
| C. H. Glasson. | Jane Goff Richardson. |
| G. R. Hall. | Robert Rogers. |
| E. B. Harris. | W. D. Ross. |
| W. E. G. Jackson. | S. E. Rossiter. |
| A. E. Johns. | S. N. Scott. |
| C. St. Johnston. | G. H. Thompson. |
| W. M. Joyce. | S. Wacher. |
| H. H. Kent. | J. J. Wheeler. |
| H. B. Lavies. | F. A. Yonge. |

MR. PARETTE, surgeon, of Beaufort, Breconshire, was, on the 14th instant, presented with an illuminated address and a massive gold Albert by the workmen and inhabitants of Sirhowy and district, in recognition of long and valuable services.

THE annual dinner of the East-end Tradesmen's Association in aid of the London Hospital was held on the 16th inst. The chairman, Mr. Dix, stated that the members of the society now numbered 311, and that its efforts had resulted in the addition of something like £1500 to the funds of the hospital.

ANOTHER death from shock, apparently resulting from wasp-stings, is reported. A woman, aged sixty-one, residing at Langham, near Colchester, in picking grass from the roadside disturbed a nest of wasps, and was stung on the forehead. On her return home her head became much swollen; she fell into unconsciousness, and shortly afterwards expired.

THE ISLINGTON WORKHOUSE.—The excellent and courteous medical officer of the Islington Workhouse, Mr. Philip Cowen, has lately resigned his post, to the great regret of the inmates of the workhouse, who had in him a careful and wise adviser, and of all medical men whose duties brought them into occasional contact with Mr. Cowen. Mr. Cowen had also the pleasure to receive a substantial proof of esteem from his fellow officials in the institution. He leaves the workhouse to commence private practice. The guardians have shown their respect for him in giving him the charge of an outside district.

BEQUESTS ETC. TO MEDICAL CHARITIES.—Mr. Peregrine H. Purvis, late of Winchmore-hill, bequeathed £100 each to the Royal Free Hospital, the Metropolitan Free Hospital, the British Home for Incurables, the Earlswood Asylum, the City of London Hospital for Diseases of the Chest, and the Deaconesses' Institution and Training Hospital, Tottenham. By the will of Mr. John Rables, late of Camden-road, the German Hospital, Dalston, becomes entitled to £200. The managers of the Metropolitan Convalescent Institution have received from an anonymous donor the sum of £6500, on condition that they at once establish a seaside convalescent home. Miss Fanny Brookman, of Sandford, Winscombe, bequeathed £500 to the Weston-super-Mare Hospital, and £1000 to the West of England Sanatorium.

# Medical Appointments.

*Intimations for this column must be sent* DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

ADRIEN, E. N., L.K.Q.C.P.I., has been appointed Medical Officer to the Balbriggan District of the Balrothery Union, vice McEvoy, resigned.

BUCKENHAM, J., L.R.C.P.Ed., M.R.C.S.E., has been appointed Public Vaccinator for the Borough of Cambridge, vice Knowles, deceased.

DALE, B. H., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Arncliffe District of the Settle Union.

ENGLAND, W., M.D., F.R.C.S.E., has been appointed Medical Officer to the First District of the New Winchester Union.

HAMMOND, G., L.D.S. R.C.S.E., has been appointed Dental Surgeon to the Western General Dispensary, Marylebone-road.

HARRISON, H. F. E., L.R.C.P.L., M.R.C.S.E., has been appointed Public Vaccinator for No. 2 District of the Fulham Union.

KNOWLES, E., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the First District of the Cambridge Union, vice Dr. Knowles, deceased.

MAGNER, E., M.D., M.Ch., L.M.K.Q.C.P.I., has been appointed House-Surgeon to the Cork Workhouse, vice Riordan, resigned.

PENTLAND, A., M.B., L.R.C.S.I., has been appointed Medical Officer to the Ryan Dispensary District of the Mohill Union, vice Creery, resigned.

POLAND, J., L.R.C.P.L., has been appointed Registrar to the North-East Hospital for Children.

PORRITT, N., M.R.C.S.E., has been appointed House-Surgeon to the Huddersfield Infirmary, vice Evans, resigned.

ROWNTREE, W. G., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Barnsbury District of the Islington Union, vice Hurston, resigned.

SOUTHEY, A. J., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Slough Urban Sanitary District for three years. £25 per annum.

STEELE, R., L.R.C.P.Ed., M.R.C.S.E., has been appointed House-Surgeon to the North-East Hospital for Children.

STEVENSON, T., M.D., F.R.C.P.L., has been appointed Public Analyst for the Borough of Godalming for one year.

WALSH, P. C., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Frenchpark Dispensary District of the Castlerea Union, vice Gillespie, resigned.

# Births, Marriages, and Deaths.

## BIRTHS.

BUCHANAN.—On the 16th inst., at Paddock House, Chatham, the wife of Walter Buchanan, M.R.C.S.E. &c. (prematurely), of a daughter.

ELLIOTT.—On the 14th inst., at Mansfield, Notts, the wife of Thomas Elliott, M.D., of a son.

GRIMBLY.—On the 9th inst., at Newton Abbot, South Devon, the wife of Richard Henry Grimbly, M.R.C.S.E., of a daughter.

GUNNING.—On the 13th inst., at Silverdale, Staffordshire, the wife of John Edmund Gunning, M.R.C.S.E., of a son.

MOORE.—On the 13th inst., at Roker-terrace, Sunderland, the wife of Dr. George Moore, Fleet Surgeon, Royal Navy, of a daughter.

PARAMORE.—On the 13th inst., at Hunter-street, Brunswick-square, the wife of Richard Paramore, M.R.C.S.E., of a daughter.

## MARRIAGES.

COLBOURNE—KRABBÉ.—On the 7th ult., at St. John's Church, Buenos Ayres, Louis Colbourne, M.D., to Nora, third daughter of the late Charles Brehmer Krabbé, Esq.

MACREADY—DAVIDSON.—On the 1st inst., at the Parish Church of St. Marylebone, Jonathan F. C. H. Macready, Esq., F.R.C.S.E., of Harley-street, to Fanny Sarah, youngest daughter of the late James Davidson, Esq., of the Bengal Civil Service.

PARISH—ANDERSON.—On the 9th inst., at Christ Church, Erith, Kent, Frank Parish, M.R.C.S.E. & L.R.C.P., of Worthing, Sussex, son of John Parish, Esq., of Erith, to Emma Frances, eldest daughter of William Anderson, Esq., C.E., of Erith.

PHILLIPS—TOMS.—On the 4th inst., at St. Abbot's, Kensington, George Bagster Phillips, M.R.C.S.E., of Spital-square, Norton Folgate, to Lizzie Toms, of Dorset Villa, Campden-hill, youngest daughter of the late John Toms, of Chard, Somerset.

RENNER—BERTLING.—On the 2nd inst., at Portsdown-road, Charles Renner, Esq., M.D., to Emma, eldest daughter of Robert Bertling, Esq., M.D.

## DEATHS.

BREEZE.—On the 5th inst., at his residence, Park Lodge, Finchley, Richard Goodwin Breeze, Esq., M.B., M.R.C.S.E., only surviving son of the late Rev. Richard Breeze, aged 46.

DAVIES.—On the 5th inst., in London, John Davies, M.D., late Surgeon to the Ebbw Vale Iron Works, aged 60.

IMRAY.—On the 22nd ult., at his residence, Saint Arament, Dominica, West Indies, the Hon. John Imray, M.D., much loved and deeply regretted. Friends will please kindly accept of this intimation.

REID.—On the 20th inst., at Moira House, Arnold, Notts, Alexander William Reid, M.A., M.B., C.M. Glasg., L.R.C.S.Ed., aged 31.

STOKES.—On the 18th inst., at Clanricarde gardens, Bayswater, London, John Milbourne Stokes, M.D., of Milbourne, Hawke's Bay, New Zealand, aged 67. New Zealand papers, please copy.

STOLTERFOTH.—On the 19th inst., at Queen's-park, Chester, Sigismund Stolterfoth, M.D., F.R.C.P., late of Dover, in his 65th year.

**N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.***

## METEOROLOGICAL READINGS.

*(Taken daily at 8.30 a.m. by Steward's Instruments.)*

THE LANCET OFFICE, September 22rd, 1880.

| Date. | Barometer reduced to Sea Level, and 32° F. | Direction of Wind. | Dry Bulb | Wet Bulb | Solar Radia in Vacuo | Max. Temp Shade | Min. Temp | Rain fall. | Remarks at 8.30 A.M. |
|---|---|---|---|---|---|---|---|---|---|
| Sep. 17 | 29·84 | W. | 59 | 57 | 86 | 66 | 53 | .. | Overcast |
| ,, 18 | 29·72 | W. | 59 | 58 | 89 | 64 | 55 | 0·05 | Raining |
| ,, 19 | 29·81 | S.W. | 46 | 45 | 84 | 60 | 43 | 0·25 | Raining |
| ,, 20 | 29·93 | W. | 54 | 51 | 93 | 64 | 45 | 0·13 | Bright |
| ,, 21 | 29·92 | W. | 54 | 52 | 66 | 59 | 48 | 0·02 | Overcast |
| ,, 22 | 29·82 | W. | 56 | 56 | 87 | 71 | 51 | 0·02 | Overcast |
| ,, 23 | 30·17 | N.E. | 62 | 60 | 81 | 67 | 56 | .. | Overcast |

# Notes, Short Comments, and Answers to Correspondents.

*It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.*

*Local papers containing reports or news-paragraphs should be marked.*

*Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.*

*Lectures, original articles, and reports should be written on one side only of the paper.*

*We cannot prescribe, or recommend practitioners.*

*All communications relating to the editorial business of the journal must be addressed "To the Editor."*

*Letters relating to the publication, sale, and advertising departments of* THE LANCET *to be addressed "To the Publisher."*

### OBLIQUE INCISIONS.

AT a recent meeting of the Philadelphia Academy of Surgery, Dr. Packard called attention to the advantage of oblique cutaneous incisions, not only in avoiding scar, but in promoting immediate union. Though the method is no novelty, the hint may be useful to young surgeons elsewhere than in America.

*J. G. S.*—We believe our correspondent's qualifications would be admitted for the appointment; but it would be best to write to the Secretary of the Local Government Board (Ireland), Dublin, and ask for a copy of the Regulations concerning the appointment of union medical officers.

*D. M. R.*—We know of no institution of the kind, except perhaps the Ladies' Charity School, 23, Queen-square, W.C.

### EFFECTS OF AN EXCLUSIVE MEAT DIET.

*To the Editor of* THE LANCET.

SIR,—Can any reader of THE LANCET kindly supply me with information on an experiment tried at the Gobelins? The experiment was to feed criminals on exclusive meat diet. They died in a few days. Any information on the subject, or an account of this particular case, will oblige,

Yours truly,

Sept. 14th, 1880. DIETETIC.

*** We are not acquainted with the particulars of the experiment alluded to by our correspondent. The exclusive use of a meat diet could hardly be fatal in a few days. The first serious result would be the development of scurvy, and it is hardly to be supposed that, after the serious symptoms which accompany the disease had manifested themselves, the experiment would have been pushed to a fatal conclusion. In an experiment, however, made on dogs, a diet consisting of purely proteid material, such as dried fibrin or coagulated albumen, proved speedily fatal, since these substances do not contain the fatty principles and extractives found in ordinary meat, and which thus render it a fairly representative food. Dogs fed exclusively on Liebig's extract were found to die sooner than dogs not fed at all. This has been accounted for as due to the deleterious influence of the potash salts of the extract; for, though these are indispensable to the economy, a large dose of them is injurious in the absence of the food whose metabolism it is their office to direct. For the latest particulars with regard to the physiological effect of meat diet, we would refer our correspondent to Professor Foster's "Text-book of Physiology," and to some observations made on this point by Dr. Ralfe, and published by him in our columns, 1877, in a contribution entitled "An Inquiry into the General Pathology of Scurvy."—ED. L.

### A CHINESE OPINION OF WESTERN MEDICAL PRACTICE.

THE *Foochow Herald* publishes the following translation of an article from a Mandarin organ. The portrait of the European practitioner of medicine is certainly not flattering:—

"The reason why foreigners adhere to their own system is because they are well aware that China and foreign lands are different, that the constitutions of the people and medicines and climates are likewise different, that the countries are thousands of miles apart, the languages and tastes are also dissimilar, and that under these circumstances the medical practice cannot be the same. Otherwise, with their intelligence, western nations would have had no difficulty in learning anatomy on Chinese principles, and would have adopted our ancient system. It is because they do not understand our principles that they retain their own medical science for their own use. But our people do not understand the foreigners' principles, and we do not want to borrow foreigners' science to cure us. In so doing we are stupid and mistaken, whether that science be good or bad. As people say, they are foolish doctors who cheat others. Because they know nothing of the pulse, they delight to copy foreigners who pay no attention to the pulse; because they know nothing of the nature of drugs, they delight in western science, which does not inquire into the nature of drugs. They (the foreigners) force upon their patients pills, powders, plasters, and potions, without knowing anything about them. They never adopt the plan of writing out descriptions of cases. In their surgical practice they cut, slice, chop, and hack in the cruellest manner. They perform the most horrible and disgusting of operations with the nonchalance of a juggler playing with his ivory balls, utterly regardless of their patient's life. The proverb that it is no good to cure a disease if you kill your patient applies to them thoroughly. These doctors are just like executioners, except that the latter kill by order those who ought to die. The former with a turn of the wrist calmly and coolly kill those who have done no wrong, but have merely asked to be cured of some disease. Neither heaven nor mankind can be insensible to this, which is insupportable, if there be anything that is insupportable. The desire of heaven and earth is to give life to men; the wish of princes and rulers is to preserve it. These people make a business of killing men, and do so under the pretence of saving their lives. They should be happy that they are able to remain upon the earth."

*Vertebra.*—By the reading of the Regulations, it would appear that both examinations must be passed. Application might be made to the Secretary.

*Zymotic.*—The paper will appear in an early number.

*Mr. Buckland.*—We do not prescribe.

### THE CASE OF MR. O'BRIEN JONES.

*To the Editor of* THE LANCET.

SIR,—The case of Howell *v.* Jones and West must be fresh in the recollection of your readers, and I think only requires increased publicity in order to obtain for Mr. Jones such a response as will fully compensate him for the pecuniary loss he has sustained—viz., £500. The following sums have already been received:—

*Special Donations.*

| | | | |
|---|---|---|---|
| The Rev. B. B. Beckett, Vicar of Epsom .. | £10 | 10 | 0 |
| Mrs. Beckett .. .. .. .. .. .. .. | 10 | 10 | 0 |
| R. Brooks, Esq. .. .. .. .. .. .. .. | 21 | 0 | 0 |
| H. Brooks, Esq. .. .. .. .. .. .. .. | 10 | 0 | 0 |
| J. E. Erichsen, Esq. .. .. .. .. .. .. | 10 | 10 | 0 |
| Dr. Drage Hatfield .. .. .. .. .. .. | 10 | 0 | 0 |
| | 72 | 10 | 0 |
| Subscriptions to this date .. .. .. .. .. | 187 | 15 | 6 |
| | £260 | 5 | 6 |

I trust you will allow me by the insertion of this letter to invite further subscriptions, which will be duly acknowledged by,

Yours obediently,

ED. HART VINEN, M.D., Treasurer.

17, Chepstow-villas, Bayswater, Sept. 20th, 1880.

### "EASY EXPULSION OF GALL-STONES."

*To the Editor of* THE LANCET.

SIR,—Dr. Roderick Kennedy's communication on this subject, which appears in to-day's LANCET, deserves some comment. Dr. Kennedy states that in every case in which gall-stones were proved or presumed to be the cause of periodic suffering, and in some instances in which there was merely obstruction to the proper flow of bile, the administration of large doses of olive oil was followed by prompt and painless expulsion of a surprising number of gall-stones. It is probable that Dr. Kennedy might have obtained equally surprising results if he had administered similar doses of oil to persons who had no liver symptoms whatever. Dr. Kennedy has offered no satisfactory proof that these bodies which were expelled in such a wholesale and painless manner were really gall-stones. A reference will be found in Flint's Practice of Medicine, fourth edition, page 460, to cases where enormous numbers of fatty concretions were passed after administration of large doses of olive oil given with a view to expel gall-stones. At all events a treatment followed by such tangible results must needs be very comforting to the patient's feelings.

Yours truly,

Brixton, Sept. 18th, 1880. JAMES B. BALL.

### GLASGOW ROYAL INFIRMARY SCHOOL OF MEDICINE.

WE regret that, through an inadvertence, the above institution was omitted from the tabular list of Scotch Medical Schools in our Students' Number. Most of the information regarding the Glasgow School of Medicine was, however, comprised in a paragraph on page 446 of that number, to which we would refer our readers.

*Dr. Alderson.*—1. The age of the patient does not militate against his being the subject of typhoid fever, as this disease has been met with in subjects over forty years of age.—2. The toxic effects of quassia upon man and the higher animals was discussed by Pereira, and the history of the case recorded in the "Mirror" for August 14th leaves no room for doubt as to the symptoms exhibited being due to the drug.

*Mr. W. W. Vinnedge.*—Mr. Erichsen has written a work on the subject.

*Zero* and *D. M. R.* have forgotten to enclose their cards.

### "LEGALISED QUACKERY AND LOW CHARGES:" A DEFENCE

*To the Editor of* THE LANCET.

SIR,—Much has been written and said against the self-supporting dispensaries and the doctors attached to them; but I think the arguments that have been brought forward against them have been very fairly refuted by those most interested. I should wish to try to make some defence to the hostile criticism that appeared in your journal a few weeks since. The self-supporting dispensary is now an established institution. The numbers that have sprung up in all parts of the metropolis, and the general success attached to their establishment, stamp the fact plainly that they were required to meet a want amongst the poorer classes. In few neighbourhoods where they have been established can it be shown that the general practitioner is injured or that any chemists' shops have been closed, and no better argument can be advanced as to their utility and benefit than this general success and non-injurious effect upon the general practitioner or the legitimate part of a chemist's business. The scathing pen that writes down the self-supporting dispensary doctor abuses a very useful member of society, and does not take into consideration "the times," and that these institutions and the men for them have sprung up to supply a great and general want—viz., good advice and medicine cheap, and without in one sense "charity." As well might the practitioner who has club and union practice be abused. I have been associated with large club and union practices as well as dispensary work, and my experience is that the dispensary doctor is equally able, if not much more so, to give time, attention, and good medicine to his patients as is the club and parish doctor to his; and although there is this difference, that clubs and union appointments are mostly held to work in with private practice, I doubt if the club and union patients get the better attendance or physic supplied to them for that reason, and I would wish to ask the club doctor if the average club, which includes women and children, pays him 1s. per visit and 6d. for each bottle of medicine supplied to the sick members? yet clubs are seldom refused by the general practitioners, even in good practice, and are not unfrequently canvassed for. Then as to the impossibility to supply good medicine (in fact all that is necessary) for 6d.: I maintain it can be done, as anyone will admit who has a knowledge of the working of dispensaries, whether self-supporting or supported by voluntary contributions. The drug bill for a dispensary paying £500 a year need not exceed £70 per annum. The dispensary doctor is better off than the average rural practitioner, whose work and expenses are frequently wholly out of proportion to his receipts.

The popularity of the "dispensary" in the profession is clearly proved by the eagerness with which they are purchased when offered for sale—purchased not only by men with inferior qualifications, but by those who have distinguished themselves at their hospitals at the different examining boards. They are used as stepping-stones to better things, and many a man, who will in time to come stand well in the profession and with the public, will have to thank the ready-money dispensary for helping him to bear the heat and burden of the day.

Lastly, the old-fashioned medical etiquette is a thing of the past. Many of our leading surgeons and physicians do not hesitate to usurp the duties of the general practitioner. They certainly do not set a good example to the struggling, striving mass of professional men at the bottom stave of the ladder. We must live, and in this crowded, competing world of ours it will not do to stand and starve because such-and-such a thing is not professional according to the lights above. Without doubt the dispensary is a necessary institution, and before the medical men attached to them are so ruthlessly condemned, it would be well to inquire into and see the work done; for, believe me, many there are of us who are honestly and earnestly working in our humble way, often without fee and without appreciation, always with the hope of alleviating the suffering and distress around us, and at the same time for the support of ourselves and family. Yours obediently,

August 24th, 1880. L.R.C.P. Ed.

### VULCANITE PLATES.

DR. SEXTON, in a recent paper in the *American Journal of the Medical Sciences*, states it as his opinion that the wearing of vulcanite plates in the mouth is productive of conditions that frequently give rise to reflex aural disease.

*Mr. E. S. Scott.*—Ellis among English authors; or Smith or Meigs and Pepper among American authors.

*M. M. Heron.*—We have no knowledge of the individual.

*Dr. Percy Boulton.*—Soon.

*Dr. G. W. Parker*, (Madagascar.)—1. Reports on Disinfectants will be found in THE LANCET of July 26th and August 9th, 1873. Sulphurous acid, chloride of lime, carbolic acid, and chloride of zinc are amongst the best.—2. We shall be glad to receive the paper referred to.—3. The problem has not been solved so far as we are aware, and would form an important subject for observation and inquiry.

*Mr. Hope*, (York, W. Australia.)—The papers have been received, and are marked for insertion.

*Candidate.*—See the Students' Number of THE LANCET, September 11th.

## CHLORAL AND MORPHIA.

*To the Editor of* THE LANCET.

SIR,—In THE LANCET of March 6th of this year you were generous enough to publish a letter of mine upon "Serious Collapse from Chloral and Bromide of Potassium combined with Opium." The lamented death of Mr. Amphlett is another illustration of the fatal result of the ingestion of these drugs. The late Mr. Amphlett, whilst yet conscious, declared that he had not taken an overdose of any drug. His statement I feel sure is correct. It is the ordinary doses of the one following that of the other that produces so fatal a condition. One of the cases I alluded to in my letter of the 6th of March is somewhat similar to the late Mr. Amphlett's. The patient, a young man, had been delirious for some time. Chloral hydrate had been given without any beneficial effect. A second opinion was called in, and it was decided to give a subcutaneous injection of morphia of one-fourth or one-sixth of a grain. The patient soon became quiet, livid, and died in two hours. The doses were not above those usually given, yet death followed. The late Mr. Amphlett's almost last words were that he had not taken an excessive dose of medicine. The case given above will bear out the truth of his statement.

Yours obediently,
PETER W. DE LA MOTTE, M.R.C.S. Eng.

Staines, Middlesex, September, 1880.

*G. M.*—All advertisers are to be avoided as men outside the pale of professional intercourse.

*Dr. Beckingsale.*—The names were placed in the order in which they were returned to us.

*Mr. J. H. Courtenay.*—The paper is marked for insertion.

## "MEDICAL ETHICS AND PRACTICE IN NEW ZEALAND."

*To the Editor of* THE LANCET.

SIR,—Under the above heading in your issue of Sept. 4th is a letter signed "Doctor," dated New Zealand, Dec. 1879. As the New Zealand medical men can hardly be expected to take notice of a letter bearing an assumed name and giving no details, I think it only fair towards that body of men to ask you to insert this letter.

I was in Christchurch, New Zealand, in November and December, 1878, and had occasion to call in two medical men of that town in consultation over a patient with whom I was at the time travelling. Both of these gentlemen exhibited the most perfect acquaintance with the ethics and etiquette as usually followed by our leading London physicians and surgeons, and, in addition, went out of their way to be courteous to me as being a stranger, as well as being a professional brother. During my short stay in Canterbury colony I met several other medical men, and in all cases was very pleased to see the high standard of ethical bearing taken by our colonial *confrères*. I can assure you it would contrast very favourably with that commonly exhibited in this country. In Melbourne and Sydney I can also attest to the high position and delicate appreciation of points of ethics shown by the leading medical men. There are, of course, numerous quacks and bad cases of advertising; but the respectable people in the colonies never patronise such men, and know quite well the value of being treated by men who appreciate a good code of ethics.

Yours faithfully,
London, S.W., Sept. 18th, 1880. J. KINGSTON BARTON.

## COATED PILLS.

*To the Editor of* THE LANCET.

SIR,—I should like to call the attention of your readers to a matter which has lately come very prominently under my notice. I refer to the use, among dispensing surgeons, of the coated pills as usually supplied by wholesale druggists. It has been my custom to have a certain number of pills of various formulæ made up and coated by my wholesale druggist. On several occasions these pills have hardly acted as one would have wished, and the other day the following occurred:—A patient consulted me, who appeared to be suffering from an attack of dyspepsia. I prescribed a tonic mixture to be taken three times a day, with one aperient pill (coated) with each dose of the mixture. In two days the aperient effect was *nil*. I repeated the mixture, substituting pil. cathart. fort. for the pil. aperiens. After having taken thirteen of these with no aperient effect, it occurred to the patient to divide two of the pills. This was followed by considerable disturbance of the bowels. The patient having told me of this, I made up two pills of the same nature, and these, too, were followed by markedly aperient effects. The question, therefore, naturally arises: Is it possible that coated pills in many cases are never dissolved at all? If this be so, surely it gives rise to a question of no little importance, taking into consideration the enormous number of coated pills that are used in the present day.

I think it would be interesting to the general practitioner branch of the profession to hear the opinions of men who have had extensive experience of coated pills.

Yours faithfully,
Shipdham, Norfolk, Sept. 14th, 1880. IRVINE K. MILNE, M.D.

*Veritas.*—Though we do not agree with our correspondent's views, we might have been disposed to allow him to ventilate them in our columns; but the motives he imputes and the epithets he applies to the gentlemen respecting whom he writes make such a course quite impossible.

*Dr. Roderick Maclaren.*—The matter shall have attention.

## THE LICENCE OF THE APOTHECARIES' COMPANY.

*To the Editor of* THE LANCET.

SIR,—As an old member of the profession, and one having a sincere regard for its position in the eyes of the public, I have read with much satisfaction the various articles that have lately appeared on this subject in the columns of THE LANCET, and trust that you will continue to uphold the view you have hitherto taken of the question.

It is impossible to doubt that the Apothecaries' Company as a licensing body is an anomaly and a superfluity. It is so in the eyes of the most intelligent members of the profession in this country, and in the eyes of foreigners it involves an absurdity, which they find it difficult to comprehend. As to the attempts made to explain away the relations of the licensing to the trading parts of the Company's affairs, they do not appear to me to be either very successful or very intelligible; for I suppose it will not be denied that a trade is still carried on by somebody at the Apothecaries' Hall, and that therefore the mere deputing of the licensing to other parties who use the name of the Company is something very like a subterfuge. But however this may be, the fact remains that the Company as a licensing body is a superfluity, and that if it retired from the scene, its place could at once be effectually supplied by the conjoint action of the Colleges of Physicians and Surgeons.

"Delenda est Carthago."

I am, Sir, yours &c.,
September 9th, 1880. F.R.C.S. Eng.

## MEDICAL DEPARTMENT OF THE CONVICT SERVICE.

*To the Editor of* THE LANCET.

SIR,—Will you allow me to give a warning note to all who may be invited to accept employment in the Medical Department of the Convict Service.

Much as the Army and Navy Boards are to be condemned for their unwarrantable depreciation of, and enmity to, medical officers, the official mind that directs the affairs of prisons is invested with a thicker coating of prejudice than that which forms such a marked development in the heads of the other branches of the public service. Without the doctor the occupation of a prison governor would be at an end. Questions of every conceivable kind are submitted to the doctor's judgment from morning to night. The authorities know his value; but prejudice, or whatever the contemptible spirit is, forbids recognition of his worth. They place assistant-surgeons very nearly on an equality as to pay with a chief warder, and when promotion, which may be very slow, comes, the maximum pay never exceeds, and is often below, that of a deputy-governor, who may have been in the service only three months, and who easily acquired a knowledge of his duties in thirty minutes. As to treatment, *ex uno disce omnes*. An assistant-surgeon, who had been a distinguished scholar in his school, recently declined in health. Knowing that in two or three instances deputy governors had obtained leave of absence for long periods on sick certificate, he applied for a similar privilege, and offered to provide a substitute. The reply was on a level with the contumelious disposition of the authorities. He immediately received the notice, ordinarily given to subordinate officers and domestics, that he must go in a month, and that he would be recommended for a gratuity—probably a few pounds.

Let candidates, therefore, beware. They cannot join a more woful branch of the public service.

Yours obediently,
August 23rd, 1880. R. W.

## THE BENGAL MEDICAL RETIRING FUND.

*To the Editor of* THE LANCET.

SIR,—Amongst the numerous discussions that have followed upon the recent amalgamation of the Royal with the Indian Medical Service, I have not observed any notice in your publication of the disastrous consequences of this change to expectant annuitants.

There are many men who, like myself, have been compelled from ill health to retire from the service on a smaller pension than they otherwise might have received. They, however, always had in view their Fund annuity, to which a compulsory subscription had been paid by them from their date of joining the service. The annuitants are appointed by seniority, and the periods after which the annuity has become available for retired men was, in 1877 and 1878, twenty-four and twenty-five years respectively. Last year, in consequence of the changes in the service, our seniors retired and took the annuities that, under the former conditions of the service, would have been allotted to us.

It is now upwards of twenty-six years since I entered the Bengal Medical Service, and there are retired officers still senior to me who now find their prospects of obtaining their annuity retarded for an indefinite period through this sudden and large influx of seniors to the retired list. In March last, in consequence of a representation of this grievance that I made in February, I received a communication to the effect that the same had been referred to the Government of India.

I cannot learn that any measures have yet been taken to compensate us for the postponement of the allotment of our annuities, although it must be well known that on the 1st of November next, the date on which the allotment always takes place, most of the eight annuities will be taken up by newly retired medical officers of twenty-eight years service and upwards.

Yours truly,
September, 1880. BENGAL RETIRED.

### AN ADVERTISING HOSPITAL IN BELFAST.

As hospitals cannot advertise themselves, it must be concluded that some individual medical man is responsible for the following piece of indelicate touting:—

"SAMARITAN HOSPITAL, BELFAST. — Objects: For the medical and surgical relief of women afflicted with diseases peculiar to the sex, including displacements of the womb, tumours of the womb and ovaries, ruptures of the bladder, strictures, blood-tumours of the pelvis, abscesses of the pelvis; the infirmities and diseases incidental to pregnancy, cancers of the breast and womb, difficult and painful menstruation, &c.; also, diseases of the bladder, piles, fistula, &c. Terms of admission for pay patients: 7s., 8s., 9s., and 12s. per week, according to accommodation desired or required. Free department: There is a free ward for those unable to pay. Out-patients seen daily at ten o'clock."

### INTRA-PARIETAL TUBE.

*Mr. H. G. Dyer.*—Our correspondent's device, although ingenious, would, we fear, be attended with risk in its application.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Sturges; Sir T. D. Acland; Dr. Eustace Smith, London; Dr. Cavafy, London; Dr. Vinen, London; Mr. Stanley Haynes; Mr. Palmer; Mr. Ingpen; Dr. Burney Yeo, London; Mr. Sydney Jones, London; Dr. Whitmarsh; Dr. Beckingsale; Dr. Thomas, Glasgow; Dr. Ireland; Mr. Macdonald, Beith; Dr. Diver, Kenley; Mr. Heron; Mr. S. Cameron; Mr. Barton, London; Dr. F. H. Alderson, London; Mr. King, Exeter; Dr. Inglis; Dr. F. H. Daly; Mr. P. W. De la Motte, Staines; Dr. M. Jones, Cork; Dr. Wallace, Greenock; Mr. J. B. Ball, Brixton; Mr. Buckland; Mr. Teevan, London; Mr. B. Holt, London; Mr. Heath, London; Dr. Murray, London; Dr. Wigg, Derby; Mr. L. Tait; Mr. Macnamara, Dublin; Dr. Nicholls, Chelmsford; Dr. Woakes, London; Dr. Iliff; Mr. H. C. Burdett, London; Mr. Verdon, London; Dr. Budd, Clifton; Dr. Thomas, Sheffield; Mr. Mansfield; Mr. Jones, Menai Bridge; Dr. Charteris, Glasgow; Mr. Tudor-Risk, Harrow; Mr. W. R. Barker, London; Mr. J. D. M'Caw, Belfast; Dr. Sargent, London; Dr. Saer, Mr. Keartland, Chester; Dr. Tatham, Salford; Mr. Pilkington, London; Dr. J. Adams, Ashburton; Dr. Ashby; Mr. J. Spear, Jarrow; Dr. J. MacCormac, Lindley; Mr. Lovett, London; Dr. Stuart, Wigan; Mr. Courtenay; Mr. Sweeting, Fulham; Mr. Colbourn, Cardiff; Dr. Row; Mr. Knight, Whitehaven; Mr. Purcell, Feakle; Mr. Watkins, Worcester; Messrs. Macniven and Cameron, Edinburgh; Mr. Lloyd; Mr. Withers; Mr. Wright, Plymouth; Mr. Ricks; Dr. Struthers, Aberdeen; Mr. Johnston, Southport; Mr. Wildman, Penzance; Mr. Blott, London; Mr. Hall, Redwood; Messrs. Wilson and Son, Manchester; Dr. Wood, London; Mr. Gulliver, London; Mr. Stilliard, Birmingham; Mr. Peacocke, Bombay; Mr. Kirkman, Ramsgate; Messrs. Gurden and Co., London; Mr. Elliott, London; Dr. Kirkpatrick, Woodbridge; Mr. A. Legge, Lewisham; Mr. Gostling; Mr. Coombe, Jamalpore; Mr. Benington, London; Dr. Lawrie, Lahore; Mr. Downes, Kashmir; Dr. Maclaren, Carlisle; Messrs. Douglas and Mason, Edinburgh; Mr. Norris; Mr. Murray, Islay; Messrs. Remington and Co., London; Dr. Nash, Aldershot; Mr. Hope, York, W. Australia; Mr. Marsden, Eastbourne; Surgeon-Major Fitzgerald, Mirzapur; Mr. Cripps Lawrence, London; Mr. Walter Pye, London; Zeta; Alpha; Ichabod; Hospital; J. H. C.; An Old Subscriber; J. H. N.; L. H.; Tenax; Medicus, Elgin; W. H. L., Derby; H. C. T.; M.R.C.S., Hull; T. D. P., Willesden; L.F.P.S.G., Bradford; D. M., Bristol; Dietetic; A Provincial Practitioner; Candidate; H. M. B.; J. G. S.; The Dean of King's College Medical Department; G. M.; Medicus, Oldbeach; M., Devon; Epsilon; Beta; L.R.C.P., Kentish-town; Medicus, Chesterfield; Hygeia; Vertebra; A. S. G.; Qual; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Holmes, Maidstone; Mrs. Arkell; Mr. Wales; Mr. Johnson; Dr. Burges, Frampton; Messrs. Merritt and Co.; Mr. Watson, Chudleigh; Mr. Roberts, Attercliffe; Mr. Taunton, Norwood; Dr. Davies, Cymer; Mr. Carrington, Burnley; Dr. Parkinson, Royston; Mr. Oldfield, Watton; Mr. Garde, Bernard Castle; Messrs. Gillon and Co., Leith; Mr. Nichols, Hartest; Mr. Jeffreys, Chesterfield; Mr. Arnott, Melton; Mr. Abbott, Blackburn; Dr. Stevenson, Shaldon; Mr. Davidson, Measham; Mr. Atkinson, Snaith; Dr. While, Bradford; Mr. Harris, London; Mr. Leaver, Stratford-on Avon; Mr. Talbot, Poplar; Messrs. Johnson and Co., Southport; Mr. Roberts, Festiniog; Mr. Edwardes, Llanfyllin; Mr. Stutter, Notting-hill; Mr. Breeze, London; Mr. Heywood, Manchester; Mr. Seitz, Mickleton; E. Swansea; X., Margate; T. E. S.; Resident Pupil; Medicus, Newbury; P., F.R.C.S.; Delta, Darlington; J. G.; A. L., Derby; R. J. S., Barking; Zeta; Medicus, Slaithwaite; A. Z.; J. D., Notting-hill; M.R.C.S., Manchester; A. B., Botesdale; Medicus, Nottingham; L.; Glebethorpe; A. D. M., Ware; Medicus, Ebbw Vale; Physician, London; J. P., Axminster; Sargeon; B. A.; Medicus, Liverpool; Day, Shipton; Veritas; B.A., M.D.; Aqua Pura; &c.

*Cork Examiner, Bradford Observer, Cork Constitution, Revue d'Hygiène, Daily Bristol Times, Cork Daily Examiner, Western Morning News, Australian Medical Journal, Lincoln Gazette, Lincolnshire Chronicle, Revue Mensuelle de Laryngologie, d'Otologie, et de Rhinologie, Pharmaceutical Journal, Chemists' Journal, La Independencia Médica, Ἰατρικὴ Σύνοψις, &c. &c.*, have been received.

# Medical Diary for the ensuing Week.

### Monday, Sept. 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS. — Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

### Tuesday, Sept. 28.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

### Wednesday, Sept. 29.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN. — Operations, 2½ P.M.

### Thursday, Sept. 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL. — Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.

### Friday, Oct. 1.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

### Saturday, Oct. 2.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.


## SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year.....£1 12 6 | Six Months .....£0 16 3
TO CHINA AND INDIA ..... One Year, 1 16 10
TO THE COLONIES AND UNITED STATES .. Ditto, 1 14 8

Post Office Orders should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable at the Post Office, Charing-cross.

Notices of Births, Marriages, and Deaths are charged five shillings.
Cheques to be crossed "London and Westminster Bank."

## ADVERTISING.

| | | | |
|---|---|---|---|
| Books and Publications | £0 | 5 | 0 |
| Official and General Announcements | 0 | 5 | 0 |
| Trade and Miscellaneous Advertisements | 0 | 4 | 6 |
| (Seven lines, each averaging ten words, or seventy words in all). | | | |
| Every additional Line | 0 | 0 | 6 |
| Front Page per Line | 0 | 1 | 0 |
| Quarter Page | 1 | 10 | 0 |
| Half a Page | 2 | 15 | 0 |
| An entire Page | 5 | 5 | 0 |

The above Scale of Charges is arranged upon the basis of the classification adopted in the Index.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements (on page 2), which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.
Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.
Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.
Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.
Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom.
The postal arrangements relating to the distribution of THE LANCET will be considered from time to time in the interests of subscribers.
Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.
A First Issue is made each week at seven o'clock on Friday morning, *for the Wholesale Houses only.*
A large Colonial Edition is also published for despatch the same day.

**Agent for the Advertising Department in France—J. ASTIER, 67, Rue Caumartin, Paris.**